DRAFT

PROPOSAL SOLICITATION PACKAGE

FOR

IMPLEMENTATION GRANTS, STEP 2

FROM

INTEGRATED REGIONAL WATER MANAGEMENT GRANT PROGRAM

AUTHORIZED UNDER

PROPOSITION 50, CHAPTER 8

JUNE 2005



California Department of Water Resources Division of Planning and Local Assistance P.O. Box 942836 Sacramento, CA 94236-0001



California State Water Resources Control Board Division of Financial Assistance 1001 I Street, 16th Floor Sacramento, CA 95814 This Draft Proposal Solicitation Package (PSP) for Integrated Regional Water Management Implementation Grants, Step 2 is being provided to the Public for review and comment.

An electronic version of the PSP may be accessed via the Internet at: http://www.waterboards.ca.gov/funding/irwmgp/index.html
http://www.grantsloans.water.ca.gov/grants/integregio.cfm

Two public meetings to answer questions and accept comments on the Draft PSP for Implementation Grants, Step 2 will be held as follows:

July 28, 2005, at 1:30 p.m.

California Environmental Protection Agency 1001 I Street Coastal Hearing Sacramento, CA 95814

This meeting will be web broadcast. The broadcast may be accessed via the Internet at: http://www.calepa.ca.gov/broadcast

During this meeting questions or comments can be emailed to: dfa_grants@waterboards.ca.gov

August 4, 2005, at 10 a.m.

Los Angeles Regional Water Quality Control Board 320 West 4th Street, Suite 200 Los Angeles, CA 90013

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All public comments on the Draft PSP must be received by 5:00 p.m. on August 19, 2005

Please send or email comments to the address below:

California Department of Water Resources Division of Planning and Local Assistance Attn: Tracie Billington P. O. Box 942836 Sacramento, CA 94236-0001 tracieb@water.ca.gov

Email comments are preferred. Comments must be submitted as an MS Word compatible email attachment.

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ACRONYMS USED IN THIS PROPOSAL SOLICITATION PACKAGE

BF Benefit Factor

CALFED Bay–Delta Program

CEQA California Environmental Quality Act

CWC California Water Code

DCR Disadvantaged Community Ratio

DWR California Department of Water Resources

EIR Environmental Impact Report

FAAST Financial Assistance Application Submittal Tool

FEMA Federal Emergency Management Agency
GAMA Groundwater Ambient Monitoring Assessment

GWMP Groundwater Management Plans

IRWM Integrated Regional Water Management

MB Megabytes

NEPA National Environmental Policy Act

O&M Operations and Maintenance

PAEP Project Assessment & Evaluation Plan

PIN Proposal Identification Number PSP Proposal Solicitation Package QAPP Quality Assurance Project Plan

ROD Record of Decision

RFMF Reduced Funding Match Factor

Regional Water Board Regional Water Quality Control Board State Water Board State Water Resources Control Board

SWAMP Surface Water Ambient Monitoring Program

TBD To Be Determined

TMDL Total Maximum Daily Load UWMP Urban Water Management Plan

USEPA U.S. Environmental Protection Agency

FOREWORD SUBMITTAL OF IMPLEMENTATION GRANTS, STEP 2 PROPOSAL

This Integrated Regional Water Management (IRWM), Implementation Grant Program Proposal Solicitation Package (PSP) is for the second step of a two-step application process. On March 23, 2005 the California Department of Water Resources (DWR) and the California State Water Resources Control Board (State Water Board) released the IRWM Implementation Grants, Step 1 PSP to solicit grant proposals. On <Date to be determined (TBD)> DWR and the State Water Board invited selected applicants to submit an Implementation Grants, Step 2 Proposal, through a "Step 2 Call Back" letter. Submittal of Proposals in this second step is by invitation only. This PSP contains the procedures for submitting Step 2 applications for grant funding and the detailed scoring criteria that were not previously provided in the IRWM Grant Program Guidelines (Guidelines), November 2004.

Applicant Workshops

DWR and State Water Board will be hosting <number TBD> applicant workshops. These workshops will be centrally located in areas that are convenient to the selected prospective grant applicants. The workshops will provide specific and detailed information regarding the Implementation Grants, Step 2 application process and will afford potential applicants the opportunity to have individual technical assistance sessions with DWR and State Water Board staff to discuss their Proposal and to receive feedback on their Step 1 Proposal. Prospective applicants are encouraged to attend a convenient workshop.

Fill-able Tables

Applicants are encouraged to use the fill-able excel spreadsheet versions of the various tables provided in this PSP which can be found at the following links;

http://www.grantsloans.water.ca.gov/grants/integregio.cfm

http://www.waterboards.ca.gov/funding/irwmgp/index.html

Points of Contact

- For questions about this PSP, please contact Mr. Ralph Svetich, DWR, at (916) 651-9218 (rsvetich@water.ca.gov) or Mr. Scott Couch, State Water Board, at (916) 341-5658 (scouch@waterboards.ca.gov).
- To register for the applicant workshop and schedule a technical assistance session for a specific workshop, please contact: Ms. Glenda Heath, DWR, at (916) 651-9228.
- For questions about the Financial Assistance Application Submittal Tool (FAAST), please contact FAAST staff by phone at (866) 434-1083, Monday through Friday, 8 a.m.–5 p.m., or by email at faast_admin@waterboards.ca.gov.
- ♦ For questions about Attachment 8 Economic Analysis Water Supply Benefits, please contact Ms. Lorraine Marsh at (916) 653-6414 (lmarsh@water.ca.gov).
- For questions about the Water Quality Benefits, please contact Mr. Gerald Horner, State Water Board, at (916) 341-5279 (ghorner@waterboards.ca.gov).
- For questions regarding the 2005 Urban Water Management Plan, please contact:

San Joaquin District, Mr. Luis G Avila, (559) 230-3364, lgavila@water.ca.gov; Southern District, Mr. Sergio Fierro, (818) 543-4652, sergiof@water.ca.gov; Central District, Ms. Kim E Rosmaier, (916) 227-7584, krosmaie@water.ca.gov; Northern District, Mr. Gene Pixley, (530) 529-7392, pixley@water.ca.gov; or Headquarters, Mr. David Todd, (916) 651-7027, dtodd@water.ca.gov.

I. INTRODUCTION

Proposition 50, the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002, was passed by California voters in November 2002. This voter approved bond act amended the California Water Code (CWC) to add, among other provisions, § 79560 *et seq.* authorizing the Legislature to appropriate \$500 million for IRWM projects. The intent of the IRWM Grant Program is to encourage integrated regional strategies for management of water resources and to provide funding, through competitive grants, for projects that protect communities from drought, protect and improve water quality, and improve local water security by reducing dependence on imported water. The IRWM Grant Program is administered jointly by DWR and State Water Board.

The Guidelines (November 2004) establish the process used to solicit applications, evaluate Proposals, and award grants under this Grant Program. The Guidelines are posted on both the DWR and State Water Board websites at:

http://www.grantsloans.water.ca.gov/grants/integregio.cfm

http://www.waterboards.ca.gov/funding/irwmgp/index.html

Approximately \$148 million is available for implementation grants during the first of two funding cycles. Each grant is limited to a maximum of \$50 million.

This PSP is specifically for IRWM Implementation Grants, Step 2 applications. In Step 2, the Implementation Grant application must, at a minimum:

- Be submitted by eligible grant recipients (i.e., a public agency or nonprofit organization; see Section III.A of the <u>Guidelines</u>);
- ♦ Include projects from one or more of the water management elements listed in the CWC § 79561 (Section III.C of the <u>Guidelines</u>); and
- Be consistent with the Step 1 Proposal.

DWR and State Water Board staff will evaluate the IRWM Implementation Grants, Step 2 applications in accordance with the Guidelines and this PSP.

Prospective applicants for IRWM Implementation Grants, Step 2, should read this PSP and the entire IRWM Grant Program Guidelines. Specific attention should be paid to the Implementation Grants, Step 2 evaluation criteria (Appendix C, Section C.3 of the <u>Guidelines</u>) to ensure that the submittal will meet the grant program requirements.

II. APPLICATION INSTRUCTIONS

This section provides instructions for preparing and submitting an application. It is important that the applicants follow the instructions to ensure that their application will address all of the required elements. Applicants are reminded that, once the application has been submitted to DWR and State Water Board, any privacy rights as well as other confidentiality protections afforded by law with respect to the application package will be waived.

A complete application must be submitted no later than 5:00 p.m. on <date TBD>. Applicants must submit a complete application online using the State Water Board Financial Assistance Application Submittal Tool (FAAST). The on-line FAAST application for the Implementation Grant Program, Step 2 will be available no later than <date TBD> at the following secure link:

https://faast.waterboards.ca.gov.

Applicants are encouraged to review the FAAST User Manual and Frequently Asked Questions, available at the above link, before creating a user account and completing the online application. When an applicant has created a user account

and begins to fill out an application, FAAST assigns a unique proposal identification number (PIN). Applicants should make note of this number as it is used when an applicant needs assistance with FAAST. A new PIN will be assigned to the Step 2 Proposal; however, the Step 1 PIN must be entered into FAAST for tracking and reference purposes.

FAAST allows an applicant to save an application in progress online and submit the application when the applicant has gathered and entered all requested information. After the application is submitted, an automated confirmation email will be sent to the applicant confirming the date and time of submission. Applicants are strongly encouraged to avoid last minute submittals to allow time for FAAST staff assistance should any submittal problems occur. Applicants are also strongly encouraged to review their complete application prior to executing the submit function in FAAST. Once an application has been submitted no further modifications, additions, or deletions will be allowed.

To print out a blank copy of the entire application:

- 1. Initiate a new application and fill out the following three fields on the first page: "Project Title", "Project Description", and "Responsible Regional Water Board." Applicants can come back to edit these fields later.
- 2. Click on the "Save and Continue" button to initiate the application process.
- 3. Click on the "Preview/Submit Application" button and select the "Print" option from the browser "File" menu.

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Non-Profit Organizations: If the applicant is a nonprofit organization, the applicant must use the organization name that is registered with the California Secretary of State: http://kepler.ss.ca.gov/list.html. If a different name was initially used, please see FAAST User Manual, Section V.A. (https://faast.waterboards.ca.gov) for instructions on changing the name.

The grant application in FAAST consists of seven sections outlined below in <u>Table 1</u> – FAAST Checklist. Within FAAST, pull-down menus, text boxes, or multiple-choice selections will be used to receive answers to the questions. FAAST will allow applicants to type text or cut and paste information from other documents directly into a FAAST submittal screen.

When uploading an attachment in FAAST, the following attachment title naming convention must be used:

Att#_IG2_PIN_AttachmentName_#ofTotal#

Where:

- "Att#" is the attachment number;
- "IG2" for Implementation Grants, Step 2;
- "PIN" is the applicant's Step 2 PIN assigned by FAAST;
- * "AttachmentName" is the name of the attachment as specified in Section IV Requirements for Attachments; and
- * "#ofTotal#" identifies the number of files that make up an attachment, where "#" is the number of a file and "Total#" is the total number of files submitted in the attachment.

For example, if Attachment 3 – Work Plan for applicant with PIN "1234" is made up of 3 files, the second file in the set would be named "Att3 IG2 1234 WorkPlan 2of3".

FAAST tracks attachments by an **attachment title**, **not by file name**. The file name section in FAAST requires a computer path to the file location on the applicant's computer. While there is no specific naming convention given here for the file name, applicants should consider using a name similar to the attachment title to simplify personal file management. **Do not use special characters such as dashes, asterisks, symbols, spaces, percentage signs, etc. Underscores are acceptable, as shown above.** If an applicant needs help on FAAST, see the Foreword of this PSP for the appropriate contact information.

The checklist below is provided as a guide for applicants to ensure that they have submitted the required information.

	Table 1 – FAAST Checklist				
1.	GENERAL INFORMATION				
1.	The following fields must be completed:				
	<u>Project Title</u> – Provide title of the Proposal. If this item is not completed, FAAST will not accept the application.				
	<u>Project Description</u> – Provide a brief description of the Proposal. The length of the Project Description is limited to 1,000 characters including spaces and returns. If this item is not completed, FAAST will not accept the application.				
	<u>Project Director</u> – The Project Director is the same person as is listed in the Authorizing Documentation, Section IV of this PSP. Provide the name and details of person responsible for filing an application and executing grant agreement for applicant. Persons that are subcontractors to be paid by the grant cannot be listed as the Project Director.				
	<u>Grant Funds Requested</u> – Provide amount of grant funds requested for the Proposal in dollars.				
	<u>Local Cost Match</u> – "Local Cost Match" is the same as "Funding Match" in the Guidelines. Provide Funding Match for the Proposal in dollars. A minimum Funding Match of 10% of the total cost of the Proposal is required for IRWM Implementation Grant unless a waiver or reduction of the funding match is requested.				
	<u>Total Budget</u> – Provide total cost for the Proposal in dollars. This amount must agree with the total Proposal cost shown in Attachment 4 and Exhibit D of the application.				
	<u>Latitude/Longitude</u> – Enter latitude/longitude coordinates of the approximate midpoint of the region in degrees using decimal format.				
	<u>Watershed</u> – Provide name(s) of watershed(s) the region covers. If the region covers multiple watersheds, list the primary watershed first.				
	<u>County</u> – Provide county in which the region is located. If the region covers multiple counties, select "Multiple Counties" from the drop down list.				
	Responsible Regional Water Board – Provide the name of the Regional Water Quality Control Board (Regional Water Board) in which the region is located. If the region extends beyond one Regional Water Board boundary, select "Statewide" from the drop down list. If this item is not completed FAAST will not accept the application.				
2.	FUNDING PROGRAMS				
	Select the IRWM Implementation Grants, Step 2 Program. If this item is not completed, FAAST will not accept the application.				
3.	LEGISLATIVE INFORMATION				
J.	Enter the State assembly, State senate, and U.S. congressional districts in which the region is located. For regions that include more than one district, please enter each district. Look at tables provided in FAAST to assist with determining the appropriate districts.				
	AGENCY CONTACTS				
4.	If the applicant has been collaborating with State and Federal agencies (DWR, Regional Water Board, State Water Board, U.S. Environmental Protection Agency (USEPA), etc.) in Proposal development, please provide agency name, agency contact first and last name, phone, and email address. This information is used to identify individuals who may have an understanding of a Proposal and in no way indicates an advantage or disadvantage in the ranking process.				
5.	COOPERATING ENTITIES				
J.	Include entities that have/will assist the applicant in Proposal development or implementation. Provide name(s) of cooperating entity(ies), role/contribution to Proposal, first and last name of entity contact, phone number, and email address.				
6	APPLICATION QUESTIONNAIRE				
6.	The answers to these questions will be used in processing the application and determining eligibility and completeness.				

Table 1 – FAAST Checklist
Q1. Additional Information: Based on the region's location, what is the applicable DWR district (Northern, Central, San Joaquin, or Southern)? The following link can be used to view each district's boundaries: http://www.water.ca.gov/nav.cfm?topic=Local_Assistance&subtopic=Groundwater.
Q2. Additional Information: What are the names and numbers of the groundwater basins underlying the region? The following link can be used for further information on groundwater basin names and numbers: http://www.groundwater.ca.gov/bulletin118/ .
Q3. Additional Information: For a region that encompasses multiple counties, list the name of each county.
Q4. Additional Information: For a region that extends beyond more than one Regional Water Board boundary, list the name of each Regional Water Board.
Q5. Step 1 Information: Enter the IRWM Implementation Grants, Step 1 FAAST PIN associated with this Proposal. Has the title of the Proposal changed from Step 1? Yes or No. If the answer is yes, please enter the Step 1 Proposal Title.
Q6. IRWM Plan Adoption Date: Does the agency or organization have an adopted IRWM Plan or functional equivalent? Yes or No. If the answer is yes, please enter the IRWM Plan adoption date. If the answer is no, can the agency or organization demonstrate that an IRWM Plan will be adopted by January 1, 2007? Yes or No. Please enter the anticipated IRWM Plan adoption date.
Q7. Eligibility: List the regional agency or regional water management group members that qualify as urban water suppliers and will receive funding from the proposed grant (See Section III of the <u>Guidelines</u>). If there are none, so indicate.
Q8. Eligibility: Have all of the urban water suppliers listed in Q7 above submitted complete urban water management plans (UWMP)? Have those plans been verified as complete by DWR? If not, explain. See Section III, below for additional information regarding UWMPs.
Q9. Eligibility: Does the Proposal include any groundwater management or groundwater recharge projects or projects with potential groundwater impacts? If so, provide the name(s) of the project(s) and list the agency(ies) that will implement the project(s).
Q10. Eligibility: For the agency(ies) listed in Q9, how has the agency complied with CWC § 10753 regarding groundwater management plans as described in Section III.B of the <u>Guidelines</u> ?
Q11. Objectives: Briefly describe the objectives for the Step 2 Proposal.
Q12. Individual Project Titles: Please list the individual title of each project contained in the Proposal.
Q13. Disadvantaged Community Status: Did the applicant request a waiver or reduction of the funding match in the Step 1 grant application? Yes or No. If yes, the applicant must complete Attachment 14 – Disadvantaged Communities, and enter the following information: a) the Reduced Funding Match Factor (RFMF) proposed in the Step 1 application, b) the RFMF approved by DWR and State Water Board in the Step 2 Call Back letter, and c) the RFMF used in Step 2.
Q14. Changes to Proposal from Step 1: Has the Proposal been altered since submitting the Step 1 grant application? Yes or No. If yes, the applicant must complete Attachment 15 – Changes to Proposal from Step 1.
Q15. Modification of River or Stream Channel: Does the Proposal include a project that will modify a river or stream channel? Yes or No. If yes, the applicant must complete Attachment 16 – Modification of River or Stream Channel.
Q16. CALFED Record of Decision (ROD) Consistency: Does the Proposal assist in meeting one or more of the CALFED Bay-Delta Program goals? Yes or No. If yes, the applicant must complete Attachment 17 – CALFED ROD Consistency.
Q17. Letters of Support or Opposition: Are there any letters of support or opposition for the Proposal or individual projects contained within the Proposal? Yes or No. If yes, the applicant must complete Attachment 18 – Letters of Support or Opposition.

Table 1 - FAAST Checklist

7. **APPLICATION ATTACHMENTS**

Provide the attachments listed below by attaching files to the FAAST application. For instructions on attaching files, please refer to the FAAST User Manual. Requirements for information to be included in these attachments are found in Section IV of this PSP. When attaching files, applicants must use the naming convention found in Section IV of this PSP.

File size for each attachment submitted via FAAST is limited to 10 Megabytes (MB). Acceptable file formats are: MS Word, MS Excel, MS Project, or PDF. If the application has files larger than 10 MB, then such files must be mailed to the State Water Board on a CD. Additionally, applicants must include four hard copies, and one electronic copy, if available, on a CD of all reports, studies, environmental documents, designs and specifications referenced in the Attachment 7 and 8 tables (See Exhibits F and G, respectively) and cited in the Certification Statements contained in Exhibit H of this PSP. Four hard copies and one electronic copy, if available, of other reports and documents that will assist the reviewer in evaluating the technical adequacy should also be included with the application.

CDs and hardcopies must be received by the due date. CDs and hardcopies received after the due date will not be accepted, reviewed, or considered in the proposal evaluation.

The mailing address is:

Mr. Scott Couch State Water Resources Control Board Division of Financial Assistance 1001 I Street, 16th floor Sacramento, CA 95814

All CDs and the cover page of any hardcopy documents must be clearly labeled with the applicant name, project title, grant program name, and PIN.

Attachment #		Attachment Title							
	Attachment 1	Authorizing Documentation							
	Attachment 2	Eligible Applicant Documentation							
	Attachment 3	Work Plan							
	Attachment 4	Budget							
	Attachment 5	Schedule							
	Attachment 6	Funding Match							
	Attachment 7	Economic Analysis - Water Supply and Water Quality Benefits							
	Attachment 8	Other Expected Benefits							
	Attachment 9	Scientific and Technical Merit							
	Attachment 10	Monitoring, Assessment, and Performance Measures							
	Attachment 11	Program Preferences							
	Attachment 12 Statewide Priorities								
	Attachment 13	Financial Statements							
	Attachment 14	Disadvantaged Communities (If Applicable)							

Table 1 – FAAST Checklist								
Attachment 15	Changes to Proposal from Step 1 (If Applicable)							
Attachment 16	Modification of River or Stream Channel (If Applicable)							
Attachment 17	CALFED ROD Consistency (If Applicable)							
Attachment 18	Letters of Support or Opposition (If Applicable)							

III. ELIGIBILITY REQUIREMENTS

<u>Urban Water Management Plans (UWMPs)</u> – Section III.B of the <u>Guidelines</u> identified compliance with the Urban Water Management Act (Act) as an Eligibility Criterion. Urban water suppliers (Supplier) are required to file an Urban Water Management Plan at least once every five years, on or before December 31, in years ending in five and zero. The 2005 UWMPs are due by December 31, 2005 and will be reviewed by DWR staff on a continuous basis to determine whether or not the UWMPs are complete, i.e. in full compliance with the Act. DWR will provide the Supplier who prepared the UWMP with a review letter indicating whether the UWMP is complete or incomplete. For assistance see the Foreword of this PSP for the appropriate contact persons.

Applicants and participating agencies that are urban water suppliers <u>and</u> which have projects that would receive funding through the IRWM grant program must have their 2005 UWMP deemed complete by DWR, before DWR and the State Water Board approve the Step 2 Implementation grant awards (See Section VI – Schedule of the PSP). For UWMPs that are deemed complete after the Step 2 application submittal date but prior to the approval of grant awards, an electronic copy of the DWR review letter must be emailed to Ms. Tracie Billington at tracieb@water.ca.gov upon receipt of that letter.

- ♦ If the Supplier submitted a 2005 UWMP by December 31, 2005 and received a review letter stating the 2005 UWMP was complete, attach a copy of the review letter to Attachment 2 Eligible Applicant Documentation.
- ♦ If the Supplier submitted a 2005 UWMP by December 31, 2005 and received a review letter stating that the 2005 UWMP was incomplete, applicants are encouraged to contact the DWR District representatives who reviewed the UWMP for technical assistance, and to use the review letter to revise the 2005 UWMP for re-submittal. DWR will review any revised 2005 UWMP and issue another review letter.
- ♦ If the Supplier did not submit a 2005 UWMP by December 31, 2005, it must be submitted as soon as possible, so that DWR can review the 2005 UWMP and make a completeness determination.

<u>Groundwater Management Plans (GWMPs)</u> – Section III.B of the <u>Guidelines</u> identified GWMP compliance as an Eligibility Criterion. Applicants or participating agencies responsible for groundwater management and recharge projects or projects with potential groundwater impacts must attach a copy of the relevant documentation, depending upon which the appropriate condition, see Section III.B of the <u>Guidelines</u>, to Attachment 2 of the application.

IV REQUIREMENTS FOR ATTACHMENTS

Attachments 1 through 13 are required attachments for all IRWM Implementation Grants, Step 2 Proposals. If Attachments 1 through 13 are not provided, the application will be deemed incomplete and will not be reviewed or considered for funding (See <u>Guidelines</u> Section V.E). In addition, applicants may need to submit one or more of Attachments 14 through 18. If the required additional attachment(s), i.e. Attachment 14 – 18, is/are not provided, the application will be deemed incomplete and will not be reviewed or considered for funding. The Guidelines (Appendix C, Sections C.3 and C.4 of the <u>Guidelines</u>) and this PSP must be followed in developing the attachments.

A discussion of each of these attachments is provided below and the Attachments and associated Exhibits are summarized in Table 2 – Summary of Attachments and Corresponding Exhibits.

Table 2 – Summary of Attachments and Corresponding Exhibits						
Attachment ¹	Exhibit ²	Comment				
Attachment 1 – Authorizing Documentation	A	Used for eligibility				
Attachment 2 – Eligible Applicant Documentation	В	Used for eligibility				
Attachment 3 – Work Plan	С	Scored				
Attachment 4 – Budget	D	Scored				
Attachment 5 – Schedule		Scored				
Attachment 6 – Funding Match	Е	Scored				
Attachment 7 – Economic Analysis – Water Supply and Water Quality Benefits	F	Scored				
Attachment 8 – Other Expected Benefits		Scored				
Attachment 9 – Scientific and Technical Merit		Scored				
Attachment 10 – Monitoring, Assessment, and Performance Measures		Scored				
Attachment 11 – Program Preferences		Scored				
Attachment 12 – Statewide Priorities		Considered by Selection Panel				
Attachment 13 – Financial Statements		Considered by Selection Panel				
Attachment 14 – Disadvantaged Communities	J	If Applicable ³⁾				
Attachment 15 – Changes to Proposal from Step 1		If Applicable ³⁾				
Attachment 16 – Modification of River or Stream Channel		If Applicable ³⁾				
Attachment 17 – CALFED ROD Consistency	K	If Applicable ³⁾				
Attachment 18 – Letters of Support or Opposition		If Applicable ³⁾				

- 1) The attachment provides the applicant with general directions regarding the content.
- 2) The exhibit provides specific direction regarding what information is to be submitted.
- 3) See the appropriate attachment discussion below for the submittal requirements.

Attachment 1 Authorizing Documentation

For the "AttachmentName", following the naming convention shown in Section II of this PSP, use "AuthDoc" for this attachment. Exhibit A of this PSP contains an example for such documentation. Provide a copy of documentation, such as a resolution adopted by the applicant's governing body, designating an authorized representative to file an application and execute a grant agreement for an IRWM Implementation Grant.

Attachment 2 Eligible Applicant Documentation

For the "AttachmentName", following the naming convention shown in Section II of this PSP, use "EligDoc" for this attachment. The applicant must submit a written statement containing the appropriate information as outlined in Exhibit B of this PSP for the type of agency or organization submitting the application.

Attachment 3 Work Plan

For the "AttachmentName", following the naming convention shown in Section II of this PSP, use "WorkPlan" for this attachment. See <u>Exhibit C</u> of this PSP for detailed guidance on preparing this attachment. There is no page limitation for Attachment 3; however, applicants are encouraged to be clear and concise.

The work plan contains work item descriptions for all projects in the Proposal. The work plan must be sufficiently detailed to demonstrate that the Proposal is ready for implementation. Work item submittals should be included in the Work Plan. The Work Plan should identify linkages between and among projects that are critical to the success of the regional effort.

Attachment 4 Budget

For the "AttachmentName", following the naming convention shown in Section II of this PSP, use "Budget" for this attachment. See Exhibit D for detailed guidance on preparation of this attachment.

For each project contained in the Proposal, provide a detailed budget supporting the costs shown in Table D-1, Budget. Table D-1 must be completed for each project in the Proposal and another form must be completed as a summary or roll-up budget for the entire Proposal. In addition, a detailed estimate of costs that supports the budget must be completed. For each budget category shown in Table D-1 there may be several tasks and subtasks. The tasks and subtasks shown in the Work Plan, Attachment 3, and Schedule, Attachment 5, should agree with the information shown in this attachment for the budget.

Applicants must consider the relevant labor code compliance requirements and the applicability of prevailing wage laws in developing the estimate of project costs.

Attachment 5 Schedule

For the "AttachmentName", following the naming convention shown in Section II of this PSP, use "Schedule" for this attachment.

Applicants must submit a schedule showing the sequence and timing of work items presented in the Proposal. The schedule must show July 1, 2006, as the assumed effective date of the grant agreement. The schedule should show the start and end dates as well as milestones for each work item contained in the work plan and should be in a horizontal bar or Gantt chart format. Include a reasonable estimated end date that encompasses all aspects of the Proposal including time for any final reports and invoicing. Work items may overlap. Applicants should show any dependence on predecessors by showing links between work items.

The schedule must include a roll up summary of the entire Proposal as well as detailed schedules for each project within the Proposal. The following items should be included in the work items presented in the schedule for each project, as well as for the Proposal itself:

- Financing plan;
- Preparation and completion of requirements to comply with the California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), and other environmental documentation;
- Project design and bid solicitation process;
- Acquisition of land, or rights-of-way, if required;
- ♦ Identification and acquisition of all necessary permits;
- Construction start and end dates;
- Environmental mitigation or enhancement actions;
- Post-construction-monitoring efforts;
- Project and full-Proposal end dates;
- Deliverables; and
- Any other work items that may be required but are not listed above.

Attachment 6 Funding Match

For the "AttachmentName", following the naming convention shown in Section II of this PSP, use "Match" for this attachment. See Exhibit E for detailed guidance on preparation of this attachment.

Applicants must identify a minimum funding match of at least 10% of the total Proposal costs. However, the funding match percentage may vary between individual projects and a 10% match is not required for each individual project. The requirement for funding match may be waived or reduced for those applicants who demonstrate that the Proposal will provide significant direct benefits to disadvantaged communities. Using the budget developed for Attachment 4, identify

the total cost of the Proposal, the total requested amount of grant funds, and the total funding match, and calculate the funding match percentage of the total Proposal costs.

Attachment 7 Economic Analysis – Water Supply and Water Quality Benefits

For the "AttachmentName", following the naming convention shown in Section II of this PSP, use "WSWQBen" for this attachment. See <u>Exhibit F</u> for detailed guidance on the preparation of this attachment. There is no page limitation for Attachment 7; however, applicants are encouraged to be clear and concise.

This attachment deals with estimating and presenting economic costs and benefits of water supply and water quality aspects of the Proposal. A complete economic analysis will require that the applicant present the life-cycle costs (Capital, Replacement, and Operations & Maintenance (O&M) costs) and the water supply and quality benefits of the Proposal. All benefits should be described and quantified either in economic terms or physical terms. It may be difficult, in some instances, to quantify economic or physical benefits from projects that restore, enhance, or protect beneficial uses of water even though those projects may achieve significant water quality benefits. A qualitative analysis will not be discounted when compared to a quantitative analysis, if the applicant adequately justifies that the benefits could not be described in quantitative terms. The IRWM program preferences (Guidelines II.E) promote inclusion of integrated projects with multiple benefits, the economic analysis and evaluation is structured such that both water quality and water supply projects could achieve the highest score possible for this scoring criterion.

Attachment 8 Other Expected Benefits

For the "AttachmentName", following the naming convention shown in Section II of this PSP, use "OtherBen" for this attachment. See <u>Exhibit G</u> for detailed guidance on the preparation of this attachment. There is no page limitation for Attachment 8; however, applicants are encouraged to be clear and concise.

Benefits derived from the Proposal may extend beyond the water supply and water quality benefits described in Attachment 7 (see above). This attachment allows applicants to claim benefits other than water supply and water quality benefits. The other expected benefits that should be presented in Attachment 8 include, but are not limited to, ecosystem restoration, flood management, recreation and public access benefits, and power cost savings and production. However, such other expected benefits must be primary and direct benefits that accrue from implementation of the IRWM Plan and this Proposal and not indirect benefits.

All water supply and water quality benefits should be addressed in Attachment 7 and not repeated or double-counted in this Attachment 8. Any repeated or double-counted benefits will be removed from the analysis and the claimed benefits in the Proposal will be revised by the reviewers and the score may be reduced. Also, costs are not presented in Attachment 8; because, all costs should be captured in Attachment 7. Hence it is not necessary or appropriate to calculate Benefit/Cost ratios for the Other Expected Benefits claimed in Attachment 8.

Attachment 9 Scientific and Technical Merit

For the "AttachmentName", following the naming convention shown in Section II of this PSP, use "SciTech" for this attachment. See Exhibit H of this PSP for detailed guidance on preparing this attachment. There is no page limitation for Attachment 9; however, applicants are encouraged to be clear and concise.

The evaluation of scientific and technical merit involves determination of the (1) technical adequacy of the data and analysis used in developing each project contained in the Proposal and (2) feasibility of each project. The applicants are required to provide the certifications presented in Exhibit H and documentation to demonstrate that each project contained in the Proposal is feasible.

Attachment 10 Monitoring, Assessment, and Performance Measures

For the "AttachmentName", following the naming convention shown in Section II of this PSP, use "Measures" for this attachment. See <u>Exhibit I</u> of this PSP for detailed guidance on preparing this attachment. There is no page limitation for Attachment 10; however, applicants are encouraged to be clear and concise.

DWR and the State Water Board require that all grant funded projects monitor and report the project performance with respect to the project benefits or objectives identified in the Proposal. Applicants are required to prepare and submit a Project Assessment and Evaluation Plan (PAEP) for each project in the Proposal. The PAEP should have detailed descriptions of the methods of monitoring and measuring success of each project contained in the Proposal.

Many projects include multiple activities that will require measurement of several parameters to evaluate project performance. Applicants must be prepared to demonstrate the success of each project contained in the Proposal through the development and measurement of the appropriate metrics. These metrics may include water quality measurements; measurement-based estimates of pollution load reductions; acres of habitat restored; feet of stream channel stabilized; additional water supply; improved water supply reliability and flexibility; groundwater level measurements; stream flow measurements; or other quantitative measures or indicators. These and other measures and/or indicators should be selected to fit the performance evaluation needs of each project contained in the Proposal.

Relationships to Other Attachments

Applicants should note that the technical information provided in this Attachment will be used in evaluating the Work Plan, Budget, and Schedule. Furthermore, applicants must provide detailed technical information enabling a reviewer to understand and verify project benefits that are claimed in Attachment 7, Economic Analysis and Attachment 8, Other Expected Benefits. If the benefits claimed in Attachments 7 and 8 are not based on sound technical analysis, it may result in lower scores in Attachments 7 and 8. If the relevant supporting information requested for Attachment 10 is provided in other Attachments, then reference the exact location, including page numbers, where the information can be found.

Attachment 11 Program Preferences

For the "AttachmentName", following the naming convention shown in Section II of this PSP, use "ProgramPref" for this attachment. Attachment 11 must be no more than 3 pages in length using a minimum 10-point type font.

Submit a discussion on how the Proposal assists in meeting the Program Preference(s) as described in Section II.E of the <u>Guidelines</u>. The discussion must identify the specific Program Preferences that the Proposal will meet; the certainty that the Proposal will meet the Program Preference(s); and the breadth and magnitude to which the Program Preference(s) will be met. Meeting the Program Preference claimed will become a condition of the grant agreement in the event that the Proposal is awarded grant funding.

Attachment 12 Statewide Priorities

For the "AttachmentName", following the naming convention shown in Section II of this PSP, use "Priorities" for this attachment. Attachment 12 must be no more than 3 pages in length using a minimum 10-point type font.

Submit a discussion on how the Proposal assists in meeting the Statewide Priorities as described in Section II.F of the <u>Guidelines</u>. The discussion must identify the specific Statewide Priorities that the Proposal will meet; the certainty that the Proposal will meet the Statewide Priority(ies); and the breadth and magnitude to which the Statewide Priority(ies) will be met. Meeting Statewide Priorities will be taken into consideration by the Selection Panel, see Guidelines Section V.G. If a Proposal is given a funding preference for inclusion of Statewide Priorities, then meeting the Statewide Priorities claimed will become a condition of the grant agreement.

Attachment 13 Financial Statements

For the "AttachmentName", following the naming convention shown in Section II of this PSP, use "Financials" for this attachment.

For each agency or organization that will receive grant funding under this Proposal, provide copies of audited financial statements for the last three fiscal years of operation. Include balance sheets; statements of sources of income and uses of funds; a summary description of existing debts, including bonds; and the most recent annual budget. Please provide separate details for the water enterprise fund if applicable to an agency or organization. List all cash reserves, restricted and unrestricted, and any planned uses of those reserves. Identify any loans required for project funding and describe the repayment method of any such loans.

Discuss how the Proposal financing will affect long-term and short-term financial capacity.

Attachment 14 Disadvantaged Communities (If Applicable)

For the "AttachmentName", following the naming convention shown in Section II of this PSP, use "DAC" for this attachment. Attachment 14 is required if the applicant is requesting a reduction or waiver of the funding match because of Disadvantaged Community status.

Applicants should use Attachment 14 to document the reduced funding match presented and supply the requested project benefit ratios. Applicants requesting a waiver or reduction of the funding match must provide a signed copy of the Certification of Understanding included in <u>Exhibit J</u>. Additionally, applicants must provide a table in Attachment 14 that lists the following information for each project in the Proposal:

- Name of the project;
- Benefits from the project to disadvantaged communities; and
- The "Project Benefit Ratio" which is the ratio between the disadvantaged community population served by the project and the total population served by the project:

Project Benefit Ratio = Population DAC served by Project/Total Population Served by Project

In Attachment 14, submit only information that is required to document the changes from the Step 1 Proposal. This includes, but is not limited to, explanation, data, or calculation; however, there is no requirement to resubmit all data or calculations from Step 1. Supply enough information so that the reviewers can understand the changes and impacts of those changes in terms of disadvantaged communities.

The information requested in Attachment 14 is used to establish final agreement on the reduced funding match. In the event that a waiver or reduction of the funding match is granted, the grant agreement will include terms to ensure that the waived or reduced funding match is applied to those projects that directly benefit disadvantaged communities.

Attachment 15 Changes to Proposal from Step 1 (If Applicable)

For the "AttachmentName", following the naming convention shown in Section II of this PSP, use "Changes" for this attachment. Attachment 15 is required if the Proposal was changed from Step 1 to Step 2. Attachment 15 must be no more than 5 pages in length using a minimum 10-point type font.

The intent of DWR and State Water Board in allowing changes from Step 1 to Step 2 is to enable the applicant to improve the Proposal or individual component projects, not to authorize material revisions to the Proposal. For any changed Proposals, DWR and the State Water Board will make a determination of continued eligibility for an implementation grant. Material revisions to the Proposal other than those made in response to the Step 2 Call Back letter may result in disqualification of the Step 2 Proposal.

In Attachment 15, the applicant must clearly identify and discuss differences between the Step 1 and Step 2 Proposal. In general, those differences must be limited to necessary modifications to improve the Proposal and changes to schedules that reflect revised information. The applicant must ensure that the changes to the Proposal maintain or improve the quality of the Proposal. As applicable, the application must detail changes to the following:

- ♦ Applicant In the event the applicant has changed, please identify the Step 1 applicant name and the basis for the change.
- ♦ Proposal Title In the event that the Proposal Title has changed, please identify the Step 1 Proposal Title.
- Adoption of IRWM Plan In the event that the draft IRWM Plan was formally adopted between the Step 1 submittal date and the Step 2 submittal date, submit proof of adoption and a copy of the adopted IRWM Plan as part of this attachment.
- ♦ Work Plan Discuss any changes to the IRWM Plan or the Proposal that was evaluated in Step 1. If the suite of projects contained in the Proposal has been altered, discuss why. Discuss how the revised suite of projects contained in the Proposal meets or exceeds the objectives and benefits of the projects contained in Step 1.
- ♦ Budget Discuss any significant differences between the Step 2 budget and the cost estimate provided in Step 1. Please note the basis for changes.
- ♦ Funding Match Note any changes to the funding match, such as funding sources or percentage of the funding match.

- Disadvantaged Communities Identify any changes to the Proposal from Step 1 to Step 2 that affect the benefits to or inclusion of disadvantaged communities. This should be an overview of the changes. Attachment 14 should be used to detail the disadvantaged communities' information.
- Schedule Clearly identify any significant differences between the Step 2 schedule and the schedule provided in Step 1, especially noting any delays in initiation or completion of the overall Proposal or specific individual projects. For Proposals utilizing a draft IRWM Plan, note any delays in the schedule to adopt the IRWM Plan, paying particular attention to whether the Plan will be adopted by January 1, 2007.
- Other The applicant should note other modifications to the Proposal that occurred between Step 1 and Step 2.

Attachment 16 Modification of River or Stream Channel (If Applicable)

For the "AttachmentName", following the naming convention shown in Section II of this PSP, use "ChannelMod" for this attachment. There is no page limitation for Attachment 16; however, applicants are encouraged to be clear and concise.

Attachment 16 must be completed for any Proposal that includes a project that modifies a river or stream channel. The applicant must provide documentation that the environmental impacts resulting from such modification will be fully mitigated, considering all of the impacts of the modification and any mitigation, environmental enhancement, and environmental benefit resulting from the project, and whether, on balance, any environmental enhancement or benefit equals or exceeds any negative environmental impacts of the project. If DWR and State Water Board determine that on-balance environmental impacts of such modifications will not be fully mitigated, the corresponding portion of the Proposal will not be eligible for grant funding (See <u>Guidelines</u> Section IV.D).

Attachment 17 CALFED ROD Consistency (If Applicable)

For the "AttachmentName", following the naming convention shown in Section II of this PSP, use "CALFEDROD" for this attachment.

Attachment 17 must be completed for Proposals that assist in meeting one or more of the CALFED Bay-Delta Program goals. Such Proposals must be consistent with the CALFED Programmatic Record of Decision (ROD) and must be implemented, to the maximum extent possible, through local and regional programs. Please complete the Certificate contained in Exhibit K of this PSP for each project within the Proposal that assists in meeting the CALFED Bay-Delta Program goals (See <u>Guidelines</u> Section IV.F).

Attachment 18 Letters of Support or Opposition (If Applicable)

For the "AttachmentName", following the naming convention shown in Section II of this PSP, use "Letters" for this attachment.

Attachment 18 must be used to submit electronic copies of any letters of support for or opposition to the Proposal or individual projects contained within the Proposal. General letters of support or opposition will not be considered. Letters of support or opposition must clearly state how the implementation of the proposal will benefit or adversely impact the individual or entity providing the letter.

V APPLICATION REVIEW PROCESS

The review process is discussed in detail in Section V.G of the **Guidelines**.

Applications will first be screened for eligibility and completeness in accordance with Section V of the <u>Guidelines</u>. The information provided by applicants in FAAST, including Attachment 2 of the application, will be used in determining completeness and eligibility. All complete and eligible applications will then be evaluated as described below.

Applications that are complete and eligible will be scored based on the evaluation criteria presented in Table 3 of this PSP. Each criterion will be scored on a scale of 1 to 5, with a 1 being "low" and a 5 being "high." The score for each criterion will then be multiplied by the weighting factor shown in Table 3 of this PSP. The general scoring standard shown below will be used by the technical reviewers as the all-purpose standard unless otherwise specified in Table 3.

General Scoring Standard

- ♦ 5 A score of 5 points will be awarded where the criterion is fully addressed and supported by thorough and well-presented documentation and logical rationale.
- ♦ 4 A score of 4 points will be awarded where the criterion is fully addressed but is not supported by thorough documentation or sufficient rationale.
- A score of 3 points will be awarded where the criterion is less than fully addressed and documentation and/or rationale are incomplete or insufficient.
- ♦ 2 A score of 2 points will be awarded where the criterion is marginally addressed.
- ♦ 1 A score of 1 point will be awarded where the criterion is not addressed or no documentation or rationale is presented.

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Table 3 – Scoring Criteria and Scoring Standard						
Criteria		Range of Points Possible	Score	Scoring Standard		
Work Plan						
Scoring will be based on whether the applicant has presented a detailed and specific work plan that adequately documents the Proposal.						
Are work items for each project of adequate detail and completeness so that it is clear that the project can be implemented?	2	2 15		D		
Do the work items include appropriate work item submittals (i.e., quarterly and final reports)?	3	3–15	See <u>General Scoring Standard</u> above.			
Do the work items collectively implement the Proposal?						
Do the work items match the schedule?				R		
Does the work plan identify synergies or linkages between and among projects?						
Budget				A score of 5 points will be awarded where the budgets for all the		
Scoring will be based on whether the applicant has presented a detailed and specific budget that adequately documents the Proposal.			5	projects in the Proposal have detailed cost information as described in Attachment 4; the costs are reasonable, and all the budget categories of Exhibit D are thoroughly supported.		
Is the detail of the budget commensurate with the design stage claimed by the applicant?				A score of 4 points will be awarded where the budgets for all the projects in the Proposal have detailed cost information as described in		
Was a detailed budget provided for each project contained in the Proposal?			4	Attachment 4 and the costs are considered reasonable but the supporting documentation for some of the budget categories of Exhibit		
Do the items shown in the budget agree with the tasks shown in the Work Plan and Schedule?		1–5		D are not fully supported or lack detail. A score of 3 points will be awarded where the budgets for most of the		
Are the detailed costs shown for each project reasonable?	1		3	projects in the Proposal have detailed cost information as described in Attachment 4 but not all costs appear reasonable or supporting		
Are all the costs shown in the budget supported by documentation, if required, and is that documentation complete?				,	documentation is lacking for a majority of the items shown in the budget categories described in Exhibit D.	
				2	A score of 2 points will be awarded where the budgets for less than half the projects in the Proposal have detailed cost information as described in Attachment 4, many of the costs cannot be verified as reasonable, or supporting documentation is lacking for all of the budget categories described in Exhibit D.	
			1	A score of 1 will be awarded where there is no detailed budget information provided for any of the proposed projects.		

Table 3 – Scoring Criteria and Scoring Standard							
Criteria	Weighting Factor	Range of Points Possible	Score	Scoring Standard			
Schedule Scoring will be based on whether the applicant has presented a detailed and specific schedule that adequately documents the	1	1–5	5	A score of 5 points will be awarded if the schedule is consistent and reasonable and demonstrates a readiness to begin construction or implementation of all elements of the Proposal by January 1, 2007.			
Proposal and on the readiness to proceed with the Proposal. Does the schedule correspond to the work items described in the work plan and budget?				4	A score of 4 points will be awarded if the schedule is consistent and reasonable and demonstrates a readiness to begin construction or implementation one or more of the elements of the Proposal by January 1, 2007.		
Given the work item descriptions in Attachment 3, does the schedule seem reasonable?			3	A score of 3 points will be awarded if the schedule is nearly consistent and reasonable or demonstrates a readiness to begin construction or implementation after January 1, 2007 but before July 1, 2007.			
How many months occur between the assumed contract execution date and the start of construction for the earliest of the Proposal projects?			2	A score of 2 points will be awarded if the schedule is clearly not consistent, not reasonably achievable, or demonstrates a readiness to begin construction or implementation after July 1, 2007 but before January 1, 2008.			
			1	A score of 1 point will be awarded if the schedule does not follow the work items presented in the work plan and budget, is clearly not reasonable, or demonstrates a readiness to begin construction or implementation after January 1, 2008.			
Funding Match				sadvantaged communities refer to Attachments 6 and 14 for the adjusted g match scale.			
The scoring standard or the adjusted scoring standard for disadvantaged communities will be used to score the Funding Match	1		5	60% or greater			
criterion.		1–5	4	45–59.9%			
Is the funding match at least 10% of the total cost of the Proposal, unless a reduction or waiver in the funding match has been submitted? – <i>This is a Pass/Fail criterion</i> .			3	30–44.9%			
nat is the percentage of the funding match as compared to the total			2	20–29.9%			
cost of the Proposal?			1	10.0–19.9 %			
			Pass/ Fail	<10 – Proposal will not be reviewed and will not be considered for funding.			

Table 3 – Scoring Criteria and Scoring Standard							
Criteria	Weighting Factor	Range of Points Possible	Score	Scoring Standard			
Economic Analysis – Water Supply and Water Quality Benefits Scoring will be based on the economic benefits of the Proposal. The scores will be assigned relative to all other Proposals. Scoring is designed to not bias water supply and water quality projects with respect to each other. Does the application contain a complete economic analysis, include the life cycle costs and the water supply and water quality benefits? Is the economic analysis supported with adequate documentation? Does the application contain a benefit/cost ratio and is that ratio reasonable?	3	3–15	The minimum score for this criterion is 1 point. The remaining 4 be allocated based on: 1) Proposal's benefit/cost ratio; and 2) analysis in physical terms for benefits that cannot be quantified in terms; 3) the qualitative analysis for benefits that cannot be queconomic or physical terms; and 4) the quality of the economic a supporting documentation. Benefit/Cost ratios for all submitted Proposals will be reviewed, concept of the proposals of the economic and pronounced breakpoints in the rankings will be used to divide Proposals receiving 0 to 4 points based on the Benefit/Cost ratio.				
Other Expected Benefits Scoring will be based on the certainty that the Proposal will provide the benefits claimed, as well as the magnitude and breadth of the other expected benefits. Did the applicant provide qualitative or quantitative information describing the Other Expected Benefits of the Proposal? Are the Other Expected Benefits claimed supported with adequate documentation?	2	2–10	be all Propo demon Points inform the rev levels Other Expec qualita Unsub being minim includ limitat of this	ninimum score for this criterion is 1 point. The remaining 4 points will ocated based: 1) the benefits realized through implementation of the sal and 2) the quality of the analysis and supporting documentation astrating those benefits. will be awarded based on a comparison of qualitative and quantitative nation describing the benefits of the Proposals. Proposals will be grouped by viewers on the basis of physical quantification in to Proposals with: 1) high of Other Expected Benefits (receiving 3 to 4 points), 2) average levels of Expected Benefits (receiving 2 to 3 points) and 3) low levels of Other ted Benefits (receiving 0 to1 points). The initial score will then be adjusted trively based on the quality of the analysis and supporting documentation. stantiated or poor quality analysis or documentation can result in the score reduced by up to 4 points, provided that the final score is not less than the um score of 1. Exceptional documentation of the Other Expected Benefits, ing any description of why Other Expected Benefits are limited and why this ion is offset by an extraordinary level of benefits described in other sections PSP, can result in the score being increased by up to 2 points, provided that all score is not more than the maximum score of 5.			

Table 3 – Scoring Criteria and Scoring Standard							
Criteria		Range of Points Possible	Score	Scoring Standard			
Scientific and Technical Merit Scoring will be based on whether the applicant has demonstrated that the Proposal has scientific and technical merit. Was each project contained in the Proposal supported by thorough and well-documented information? Does the information contained in the technical documents support the technical feasibility for each project? Were the necessary certifications (See Exhibit H) provided in the application? Were the documents referenced in the certifications (See Exhibit H) provided in the application? If feasibility or pilot studies have not been conducted for an individual project(s), was an explanation provided regarding what has been done to determine the project's feasibility?	Factor		3	A score of 5 points will be awarded if all required certifications/documents are included and the Technical Adequacy Report (or narrative description) fully addresses the requirements described in Exhibit H for each of the projects in the Proposal with thorough supporting documentation. For those Proposals in which only one project is proposed, the above criteria will be used for each of the components of the project. A score of 4 points will be awarded if all required certifications/documents are included and the Technical Adequacy Report (or narrative description) fully addresses the requirements described in Exhibit H for a majority of the projects in the Proposal with thorough supporting documentation. For those Proposals in which only one project is proposed, the above criteria will be used for a majority of the components of the project. A score of 3 points will be awarded if all required certifications/documents are included and the Technical Adequacy Report (or narrative description) fully addresses the requirements described in Exhibit H for less than a majority of the projects in the Proposal with thorough supporting documentation. For those Proposals in which only one project is proposed, the above criteria will be used for less than a majority of the components of the project. A score of 2 points will be awarded if all required certifications/documents are included and the Technical Adequacy Report (or narrative description) does not fully address the requirements described in Exhibit H for any of the projects in the Proposal nor provides adequate supporting documentation.			
			1	A score of 1 point will be awarded if the applicant does not respond directly to the Scientific and Technical Merit criteria.			

Table 3 – Scoring Criteria and Scoring Standard							
Criteria		Range of Points Possible	Score	Scoring Standard			
Monitoring, Assessment, and Performance Measures Scoring will be based on whether the applicant has presented an adequate monitoring and assessment program including performance measures that will allow a determination of whether the objectives are met. Did the application provide a plan to monitor and assess performance of the Proposal? Were performance measures presented? Were the monitoring, assessment, and performance measures supported by adequate documentation? Will the proposed monitoring, assessment, and performance measures adequately demonstrate project benefits? Did the application contain a discussion on post construction/ initial implementation performance monitoring and does it appear to be reasonable?	Weighting Factor	Points	Score	D See General Scoring Standard above. R A F			

Table 3 – Scoring Criteria and Scoring Standard						
Criteria	Weighting Factor	Range of Points Possible	Score	Scoring Standard		
Program Preferences Scoring will be based on whether the Proposal will implement one or more of the specified IRWM Grant Program Preferences (See Guidelines Section II.E). Proposals that demonstrate significant, dedicated, and well-defined projects that meet multiple Program Preferences will be considered more favorably than Proposals that demonstrate a significant potential to meet a single Program Preference or demonstrate a low degree of commitment or certainty to meeting Program Preferences. Does the Proposal include projects that implement Program Preferences? Did the applicant demonstrate a high degree of certainty that the Proposal will implement the Program Preferences? Did the applicant document the magnitude and breadth of Program Preferences that the Proposal will meet?	1	1–5	5	A score of 5 points will be awarded if the Proposal will implement multiple program preferences, demonstrates a significant degree of certainty that the Program Preferences claimed can be achieved, and thoroughly documents the breadth and magnitude of the Program Preferences to be implemented.		
			4	A score of 4 points will be awarded if the Proposal includes project(s) that implement a single Program Preference, demonstrate a significant degree of certainty that the Program Preference claimed can be achieved, and thoroughly documents the breadth and magnitude of the Program Preference to be implemented.		
			3	A score of 3 points will be awarded if the Proposal includes project(s) that implement multiple Program Preferences, demonstrates a limited degree of certainty that the Program Preferences claimed can be achieved, and lacks thorough documentation that the breadth and magnitude of the Program Preferences to be implemented.		
			2	A score of 2 points will be awarded if the Proposal includes project(s) that implement a single Program Preference, demonstrates a limited degree of certainty that the Program Preference claimed can be achieved, and lacks thorough documentation that the breadth and magnitude of the Program Preference to be implemented.		
			1	A score of 1 point will be awarded if the Proposal does not address any Program Preference or the Program Preferences are highly unlikely to be implemented.		
Total Range of Points Possible 16 – 80				T		

VI. SCHEDULE

The schedule below shows the program timeline from release of the Draft Implementation Grants, Step 2 PSP through final approval Implementation Grants, Step 2 grant awards. Some of the events listed in this schedule are tentative and changes may be required. When finalized, an updated schedule will be posted on both the DWR and State Water Board web sites. Updates may also be advertised through fliers, email announcements, and news releases. Parties not already on the mailing list that wish to receive updates on the IRWM Grant Program should email contact information to:

dfa_grants@waterboards.ca.gov

Table 4 - IRWM Implementation Grants, Step 2 Proposal Solicitation Process and Schedule					
Milestone or Activity	Schedule				
OWR and State Water Board release Draft Implementation Grant, Step 2 PSP	June 20, 2005				
Public meetings to solicit comment on:					
Draft IRWM Implementation Grant Step 2 PSP	July 28, 2005 1:30 p.m.				
California Environmental Protection Agency	1.50 p.m.				
1001 I Street, Second Floor					
Coast Hearing Room					
Sacramento, CA 95814					
This meeting will be web broadcast. The broadcast may be accessed via the Internet at: http://www.calepa.ca.gov/broadcast. During this meeting, questions or comments may be emailed to: http://www.calepa.ca.gov/broadcast.					
Los Angeles Regional Water Quality Control Board	August 4, 2005				
320 West 4 th Street, Suite 200	10:00 a.m.				
Los Angeles, CA 90013					
Comments on Draft Implementation Grant, Step 2 PSP due to:					
California Department of Water Resources					
Division of Planning and Local Assistance					
Attn: Tracie Billington	August 19, 2005				
P.O. Box 942836	by 5:00 p.m.				
Sacramento, CA 94236-0001					
tracieb@water.ca.gov					
Email comments are preferred. Comments must be submitted as an MS Work compatible email attachment.					
RWM Implementation Grant Applicant Workshop Location and number of workshops to be based on the list of applicants invited to submit Step 2 Proposals.	TBD				
Release draft final PSP for Implementation Grants, Step 2 for public review period	TBD				
Implementation Grants, Step 2 applications must be submitted through FAAST to State Water Board by 5:00 p.m. Applications submitted after 5:00 p.m. on the due date will not be reviewed or considered for funding.	TBD				
D.L. His manager of the state o	TBD				
Public meeting to discuss initial funding recommendations	TBD				

EXHIBIT A EXAMPLE AUTHORIZING DOCUMENTATION

Applicants must provide documentation, such as a copy of a resolution adopted by the applicant's governing body, designating an authorized representative to file an application for an Integrated Regional Water Management (IRWM) Implementation Grant. The following is an example model resolution.

RESOLUTION NO
Resolved by the <insert board="" body,="" city="" council,="" directors,="" governing="" name="" of="" or="" other=""> of the <insert name="" of<="" th=""></insert></insert>
agency, city council, organization, or other>, that application be made to the California Department of Water
Resources and State Water Resources Control Board to obtain an Integrated Regional Water Management
Implementation Grant pursuant to the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of
2002 (Water Code Section 79560 et seq.), for the: <insert name="" of="" proposal="">. The <insert -="" officer,<="" presiding="" td="" title=""></insert></insert>
President, Agency Manager, or other officer> of the <insert agency,="" city,="" county,="" name="" of="" or="" organization,="" other=""> is</insert>
hereby authorized and directed to prepare the necessary data, conduct investigations, file such application, and execute
a grant agreement with the California Department of Water Resources or State Water Resources Control Board.
Passed and adopted at a meeting of the <insert agency,="" city,="" county,="" name="" of="" or="" organization,="" other=""> on <insert date="">.</insert></insert>
Authorized Original Signature:
Printed Name:
Title:
Clerk/Secretary:

EXHIBIT B ELIGIBLE APPLICANT DOCUMENTATION

As applicable, complete one or both of the following sections:

PUBLIC AGENCIES

- 1. Is the applicant a public agency as defined in Section III.A of the Guidelines? Please explain.
- 2. What is the statutory or other legal authority under which the applicant was formed and is authorized to operate?
- 3. Does the applicant have legal authority to enter into a grant agreement with the State of California?
- 4. Describe any legal and administrative agreements between or among partner agencies and/or organizations that ensure performance of the Proposal and tracking of funds.

NON-PROFIT ORGANIZATIONS

- 1. Is the applicant a nonprofit agency as defined in Section III.A of the Guidelines? Please explain.
- 2. Does the applicant have legal authority to enter into a grant agreement with the State of California?
- 3. Describe any legal and administrative agreements between or among partner agencies and/or organizations that ensure performance of the Proposal and tracking of funds.
- 4. Include a copy of the Articles of Incorporation and Bylaws for the organization.

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EXHIBIT C WORK PLAN

Attachment 3, Work Plan, should consist of two parts: an introduction and work items. Based on the goals and objectives of the Proposal, a description of all work that will be necessary to complete the Proposal must be included in this attachment. Any supporting documentation necessary to substantiate work already completed should be submitted as appendices to Attachment 3.

INTRODUCTION

The introduction should provide information about the Proposal including, but not limited to:

- Goals and Objective of the Proposal;
- Description of how the Proposal is consistent with the adopted IRWM Plan;
- An overview of specific projects in the Proposal, including the priority of those projects;
- Description of synergies or linkages between projects that result in added value, or require coordinated implementation or operation;
- A vicinity map showing the general location of project(s) contained in the Proposal (specific project locations will be required for Proposals that are selected for grant funding); and
- ♦ Work that has been completed or is expected to be completed prior to July 1, 2006. For example if CEQA/NEPA and other environmental compliance efforts have been completed discuss the environmental determination made by the lead agency and the documents that were filed.

Where requested funding is for a component of a larger project, this section must describe all of the components of the larger project and identify which elements of the project the IRWM grant is proposed to fund. Linkages to any other projects that must be completed first or that are essential to obtain the full benefits of the Proposal must be discussed.

WORK ITEMS

Work items are specific items that will be performed as part of the Proposal. The work items descriptions will be used as the scope of work in the grant agreement if the Proposal is selected for funding. The work item detail must be sufficient to demonstrate a high expectation of successful implementation and so that the reviewer understands the work to be performed and is able to evaluate the adequacy of the Proposal. Additionally, the work items must provide sufficient detail to justify the project and Proposal cost estimates. Work items listed in the Work Plan should be consistent with those used in Attachment 4, Budget and Attachment 5, Schedule.

The work item section must contain the following items:

- ♦ A detailed description of the Proposal and each project contained within the Proposal for which grant funds are being requested;
- For each project contained in the Proposal, include a description of work to be performed under each work item. The description should include as much detail as possible and explain all work necessary to complete each project and, collectively, the Proposal;
- A discussion of how the applicant will coordinate with its partner agencies who may receive funding from the grant and how coordination with the granting agency will be performed;
- Detailed maps that show, at a minimum, the location of activities or facilities of the project(s), the groundwater basins and surface water bodies that will be affected including modifications to any river or stream channel; the

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natural resources that will be affected; disadvantaged communities within the region; and proposed monitoring locations;

- A discussion of standards, such as construction standards, health and safety standards, laboratory analysis, or accepted classifications methods, that were used for project development and will be used in implementation;
- A discussion of the merits of the building materials or computational methods that were or will be used for project development, such as use of specific grades of building materials or use of specific, tested, and established models (or software);
- If environmental compliance efforts have not been started or completed, a plan for environmental compliance; and
- A description of submittals to the granting agency for assessing progress and accomplishments such as quarterly and final reports.

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EXHIBIT D BUDGET

For each project contained in the Proposal, provide a detailed budget supporting the costs shown in Table D-1 below. The Table D-1 must be completed for each project in the Proposal and another Table D-1 must be completed as a summary or roll-up budget for the entire Proposal. For the summary or roll-up budget, the costs shown in the "Total" column should be consistent with the costs shown in Exhibit F, Table F-3. However, if there are costs that are not eligible for reimbursement under this grant program then some of the costs in Table D-1 may differ from Table F-3. For example, the opportunity costs of property purchased before November 5, 2002, are not eligible for reimbursement (See Guidelines Section V.L.); however, such costs should be included in Table F-3 as economic costs. Reimbursable costs are discussed in the Guidelines (Section V.L and Appendix D).

		Table D-1 - Budge	t		
	Proposal Title:				
	Project Title:				
	Budget Category	Non-State Share (Funding Match)	State Share (Grant Funding)	Total	% Funding Match
(a)	Direct Project Administration Costs				
(b)	Land Purchase/Easement				
(c)	Planning/Design/Engineering/Environmental Documentation				
(d)	Construction/Implementation				
(e)	Environmental Compliance/ Mitigation/Enhancement				
(f)	Project Summary (Sum rows (a) through (e) for each column)				
(g)	Construction Administration				
(h)	Other Costs				
(i)	Construction/Implementation Contingency				
(j)	Grand Total (Sum rows (f) through (i) for each column)				% Funding Match of Total Project Costs
	Source of Funds for Non-State Share (Funding Match) Use as much space as required to show the source of the Non-State Share.			ne Non-State	

For each of the categories shown in the Table D-1 above, show the detailed costs for each project as follows:

DIRECT PROJECT ADMINISTRATION COSTS

Detail shall include hourly wage paid by discipline; number of hours to be expended for administration; and costs shown for equipment, supplies, or travel (at or below the rate allowed for unrepresented State employees) with back-up data provided. If project administrative costs are shown as a percentage of a cost, include both: a) the total on which the project administration is based (i.e., total project cost, total construction cost, etc.) and b) how the percentage was determined (i.e., flat rate, based on prior experience, etc.). This budget category includes all such costs for the grant recipient and any partner agencies or organizations. Applicants are encouraged to limit such costs to less than 5% of

the total Proposal costs. Such administrative expenses are the necessary costs incidentally but directly related to the Proposal.

LAND PURCHASE/EASEMENT

Detail shall include whether the cost is for purchase of land or an easement to use the land. If land purchase is to be included in the funding match, include whether it is a proposed acquisition or the land is already owned by the applicant or partner agency/organization. If the land is already owned by the applicant or partner agency/organization, indicate when the land was purchased and the purchase price of the land. The purchase price for that portion of the land that will be dedicated to the Proposal may, in certain circumstances, be included in an applicant's funding match.

PLANNING/DESIGN/ENGINEERING/ENVIRONMENTAL DOCUMENTATION

Detail shall include hourly wage paid by discipline, number of hours, and the total cost for the particular item (i.e., 60% design, final design, engineering field investigations, preparation of CEQA documentation, etc.). If any contingency amounts are used in the estimate, provide an explanation for the rationale used to determine the contingency percentage.

CONSTRUCTION/IMPLEMENTATION

Provide a cost estimate commensurate with the design stage that is being submitted for the project. For example, if the applicant states that the design for a particular project is at the 60% design stage, then a cost estimate with appropriate detail based on that design stage must be included. The estimate should include the quantity of materials used, unit cost, number of units, and, if possible, should have separate costs for labor, equipment, and materials. Do not show any construction/implementation contingency costs in this category. They will be shown in Construction/Implementation Contingency category. For any implementation costs, show as much detail as required to support the implementation costs shown.

ENVIRONMENTAL COMPLIANCE/MITIGATION ENHANCEMENT

This item includes an estimate of all environmental compliance, mitigation, and enhancement costs. The estimate of costs for this work should be provided in the same format as shown for Construction/Implementation.

CONSTRUCTION ADMINISTRATION

The costs to administer and manage construction of the project must be presented. Provide a discussion of the method used to determine this cost. If a percentage of construction costs is used here, indicate the percentage used. If the estimate will be based on expected hours of effort, list the hours, by discipline, unit cost, equipment costs, and total cost.

OTHER

Detail for any legal services costs required to support the project. Include the costs for licenses and permits. Include any costs of monitoring and assessment required during the construction/initial implementation of the project. Do not include any monitoring and assessment costs for efforts required after project construction is complete. Those costs should be shown in the O&M costs shown in Exhibit F, Table F-3, and also included in the O&M Costs section of this Exhibit.

CONSTRUCTION/IMPLEMENTATION CONTINGENCY

Normally these costs include costs to handle unknown conditions encountered during construction or implementation of the project and may cover items that are not yet shown in the design. Specify the percentage used for this cost, and provide a reason for using the percentage used. Include only those contingency costs for construction/implementation efforts here. All other contingency costs should be included in the appropriate cost category.

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GRAND TOTAL (SUM ROWS (F) THROUGH (I) FOR EACH COLUMN)

Sum each of the columns as shown in Table D-1 to determine the grant total costs for each project. Provide a separate table that summarizes, or rolls-up, the costs for each project proposed in the proposal. From this summary sheet use the grand total from the "Non-state Share (Funding Match)" column, and use this cost to include in Table 1 – FAAST Checklist, under the box entitled "Local Cost Match". Use the grand total from the "State Share (Grant Funding)" column, and use this cost to include in Table 1, under the box entitled "Grant Funds Requested." Finally, use the grand total from the "Total" column, and use this cost to include in Table 1, under the box entitled "Total Budget."

OTHER COSTS

The costs shown in this section are not reimbursable project costs for grant funding purposes, but are necessary for the economic analysis detailed in Exhibit F. Include these costs discussed below on a separate sheet for each project contained in the Proposal.

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O&M Costs

Provide a detailed breakdown of the O&M costs for the new or expanded facilities proposed for each project in the Proposal. The costs shown here must match those shown for O&M in Exhibit F, Table F-3. For Table F-3, these costs would be placed in the "Other" category column. The monitoring costs described in Attachment 10, Monitoring, Assessment, and Performance Measures, need to be shown in the O&M costs. Show O&M costs in the following format:



- a. Annual administrative costs:
- b. Annual operating costs;
- c. Annual maintenance costs, and

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d. Other annual costs, such as monitoring.

Replacement Costs

For each project contained in the Proposal, provide a listing of all expected replacement costs over the project's life cycle, normally 50 years. Include the part or component of the project that needs replacement, its presumed life expectancy, and the current cost (in 2004 dollars) of that part or component.

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DEFINITION OF DESIGN PERCENTAGES

For purposes of this PSP, the following design percentages are provided to assist applicants in determining their design percentage for projects under design:

10% (Conceptual) Design

The 10% design shows project siting and the layout of major facilities. No specifications are provided. Design analysis has been started and is nearing completion. Background geologic, seismic literature research has been performed. A listing of project objectives, environmental or infrastructure constraints is provided.

30 % (Concept) Design

The 30% design shows project siting and all project appurtenances. Some detail is provided for each of the disciplines (such as civil, structural, mechanical, and geology). Design analysis should be complete at this stage. A rough listing of specifications required for the project is provided. Preliminary Geologic and Foundation Studies have been performed.

60% Design

The 60% design is the same as for the 30% design submittal, with more details provided for each design discipline, including electrical, and traffic control, if applicable. Standard details and outline specifications, including the front

end and technical portion, are provided. Foundation studies completed, lab testing performed, structural analysis and/or modeling performed, permitting underway.

90% (Pre-final) Design

The 90% design is the final, un-stamped, submittal. Complete plans and specifications are prepared, and a detailed itemized engineer's cost estimate is included.

100% (Final) Design

The 100% design is the design package that will be advertised for project award for construction/ implementation of project. The package consists of the complete, signed, and As-Advertised plans and specifications.

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EXHIBIT E FUNDING MATCH

Applicants who in Step 1 submitted a request for waiver or reduction of the funding match must answer the questions below and complete the table. An adjusted funding match scoring criterion may be calculated by applying an Adjustment Factor, based on the disadvantaged community ratio (DCR), and Benefit Factor (BF), to the standard funding match scoring criterion.

1.	Check the applicable statement:
	☐ The DCR and BF are in accordance with those presented in the Step 2 Call-Back Letter.
	☐ The DCR and BF are from calculations submitted with this application that are different from those presented in the Step 2 Call-Back Letter.
2.	Complete Table E-1 by entering the DCR and BF in the appropriate table cell; calculating the adjustment

factor, rounded to the nearest 0.1; and multiplying the standard funding match ranges by the adjustment factor

Table E-1 -Adjusted Funding Match Percentage							
Score	Standard Funding Match Percentage of Total Proposal Costs		Adjustment Factor = 1-(DCR x BF) where DCR = and BF =	Adjusted Funding	ged Community Match Percentage of oposal Cost		
	Low	High		Low	High		
5	60%	> 60%					
4	45%	59.9%					
3	30%	44.9%					
2	20%	29.9%					
1	10%	19.9%					
Fail	<10 – Proposal will not be reviewed						

Example: The DCR = 0.75 and the BF is 0.50. The table would be populated as:

and will not be considered for funding

to determine the adjusted funding match percentage.

Score	Standard Funding Match Percentage of Total Proposal Costs		Adjustment Factor = 1-(DCR X BF) 1-(0.75 x 0.5) = 0.6	Adjusted Funding Match Percentage of Total Proposal Cost		
	Low	High		Low	High	
5	60%	> 60%	0.6	36%	>36%	
4	45%	59.9%	0.6	27%	35.9%	
3	30%	44.9%	0.6	18%	26.9%	
2	20%	29.9%	0.6	12%	17.9%	
1	10%	19.9%	0.6	6%	11.9%	
Fail	<10 – Proposal will not be reviewed and will not be considered for funding			<6 % – Proposal will not be reviewed and will not be considered for funding		

EXHIBIT F ECONOMIC ANALYSIS OF WATER SUPPLY AND WATER QUALITY BENEFITS

INTRODUCTION AND SCOPE OF ECONOMIC ANALYSIS

This exhibit provides methods and formats for estimating and presenting economic costs and benefits of water supply and water quality aspects of the Proposal.

An economic analysis must be conducted for the entire Proposal contained in the grant funding application, regardless of funding sources. Applicants must report all economic costs for the life cycle of the Proposal(s), typically 50 years. Sunk costs should not be included as economic costs. The water supply and water quality benefits must be presented and quantified in economic terms, if possible. If these benefits cannot be quantified in economic terms, they should be quantified in physical terms. All benefits must be described qualitatively if they cannot be quantified.

The tables and formats presented herein are not required; the applicant may choose to present the required information in other formats. Full excel spreadsheet versions of the example tables can be found at the links listed in the Foreword of this PSP

The economic analysis described below consists of three parts:

- Presentation of Proposal costs;
- Presentation of Proposal benefits; and
- Determination of the Benefit/Cost Ratio.

It should be noted that the determination of Proposal costs and benefits must be technically sound to be acceptable for use in the economic analysis. Detailed technical information on the methods used in determining Proposal costs and benefits must be provided in Attachment 9, Scientific and Technical Merit. Any references cited in the tables (Tables F-3 through F-8) must be submitted with the application. Table 1 – FAAST Checklist, Item 7 lists the format and number of copies for the documentation required to be submitted.

ANALYSIS GUIDELINES AND ASSUMPTIONS

Applicants must use the following guidelines and assumptions in determining the benefits and costs for the Proposal:

- Consistency The economic analysis must be completed for the entire Proposal and must be consistent with other data and information provided in the Proposal.
- ♦ With-Proposal and Without-Proposal Comparison The economic analysis should be based on a comparison of expected conditions with and without the Proposal over the period of analysis.
- Period of Analysis The economic analysis will be based on the 50 years from 2005 to 2054, unless otherwise specified by the applicant. Applicants must provide justification for a shorter or longer period of analysis based on the expected life of the Proposal. If applicants deviate from the 50-year period, they should add the construction period to the expected life of the Proposal to obtain the period of analysis.
- Accounting Perspective The economic analysis should include all costs and all water supply and water quality benefits. A significant portion of costs and benefits should focus on the region of the Proposal.
- ♦ Sunk Costs and Opportunity Costs Sunk costs are costs spent in the past that have no opportunity costs or salvage value; therefore, they cannot be recovered and should not be counted. Opportunity cost is the benefit that a resource could provide in the without-Proposal condition and should be counted. For example, land already

purchased for use in a project could be used for other purposes; therefore, a reasonable estimate of the market value of that land should be included as a Proposal cost. Note that any opportunity cost from a resource provided before the passage of Proposition 50, November 5, 2004, cannot be included in the Cost Estimate Sheet of Attachment 4 – Budget, because it is not eligible for reimbursement; however, it should be included here as an economic cost to calculate the benefit/cost ratio.

- ♦ Economic Cost All costs associated with the Proposal, regardless of who bears the cost and regardless of the funding source is considered an economic cost. Opportunity costs should be included but sunk costs should be excluded.
- ♦ Discount Rate Because costs and benefits are evaluated over a long period of analysis, they must be discounted to reflect the value of money over time. All applicants must use a 6% discount rate. Table F-1 provides the discount factors that must be used.

Table F-1 - Discount Factors							
Year	Discount Factor	Year	Discount Factor	Year	Discount Factor		
2005	1.06	2022	2.85	2039	7.69		
2006	1.12	2023	3.03	2040	8.15		
2007	1.19	2024	3.21	2041	8.64		
2008	1.26	2025	3.40	2042	9.15		
2009	1.34	2026	3.60	2043	9.70		
2010	1.42	2027	3.82	2044	10.29		
2011	1.50	2028	4.05	2045	10.90		
2012	1.59	2029	4.29	2046	11.56		
2013	1.69	2030	4.55	2047	12.25		
2014	1.79	2031	4.82	2048	12.99		
2015	1.90	2032	5.11	2049	13.76		
2016	2.01	2033	5.42	2050	14.59		
2017	2.13	2034	5.74	2051	15.47		
2018	2.26	2035	6.09	2052	16.39		
2019	2.40	2036	6.45	2053	17.38		
2020	2.54	2037	6.84	2054	18.42		
2021	2.69	2038	7.25				

Dollar Value Base Year – All costs and benefits will be expressed in 2004 dollars. When using economic data from past years, costs should be escalated to account for inflation. The update factors shown in Table F-2 can be used to update those dollar values to 2004 dollars. Table F-2 shows the update factors to be used for 1990 through 2004. If the applicant needs to update costs from years preceding 1990, please see the Foreword of the PSP for the appropriate contact person. Other, more specific indices (such as the Engineering News-Record Construction Cost Index) can be used if justified by the applicant.

Table F-2 - Update Factors							
Year	Update Factor	Year	Update Factor	Year	Update Factor		
1990	1.32	1995	1.17	2000	1.08		
1991	1.28	1996	1.15	2001	1.05		
1992	1.25	1997	1.13	2002	1.03		
1993	1.22	1998	1.12	2003	1.02		
1994	1.19	1999	1.10	2004	1.00		

INFORMATION TO BE INCLUDED IN THE ECONOMIC ANALYSIS—WATER SUPPLY AND WATER QUALITY BENEFITS

Each application must provide the following information:

- Detailed description of the Proposal's economic costs;
- Cost details for the entire Proposal using Table F-3;
- Detailed description of the Proposal's water supply and water quality benefits;
- Quantified estimates of physical benefits, if possible, using Table F-4;
- Economic benefits analysis, if possible, using the following:
 - If benefits are achieved from restoring, protecting, or enhancing beneficial uses, particularly those on impaired water bodies, provide the following:
 - The necessary information identified in "Water Quality Benefits" which follows; and
 - ii. Water quality benefit quantified in economic terms, Table F-4, F-5, or F-6, if possible.
 - If unit monetary value for a quantified physical benefit is available, complete columns (b) through (f) of Table F-4;
 - If the benefit is an avoided cost of future projects, complete Table F-5;
 - If the benefit is estimated in some other way (i.e., not using a unit monetary value or an avoided cost) complete Other Water Supply or Other Water Quality Benefits Claimed (Table F-6); and
 - Total Benefits Summary for Water Supply and Water Quality Benefits (Table F-7).
- Narrative discussion of the costs and benefits of the Proposal, which describes, qualifies, and supports the values entered in the tables; and
- Documentation to support information presented in the Proposal.

Applicants should take necessary care to provide realistic and supportable cost and benefits analyses. Other studies or documents used to support cost and benefit estimates should be clearly referenced. A history of investigations of the Proposal and the water supply and/or water quality issues addressed by the Proposal should be used to help document the benefits of the Proposal. All documentation is to be made available to reviewers upon request.

PROPOSAL COSTS

Cost Guidelines

This section provides guidance for describing all costs that will be incurred to implement and operate the Proposal and to achieve benefits from the Proposal. This includes costs funded by local, state, and federal agencies and non-profit organizations. All costs, both initial investments and operational costs, associated with the Proposal necessary to accomplish full implementation of the Proposal and achievement of the stated benefits, must be included in the economic analysis. All costs must be clearly documented to allow a reviewer to assess the accuracy and reasonableness of the analysis. If the reviewers believe that some Proposal costs are not included in the analysis, a lower score will result.

The Proposal costs presented in this section should be consistent with Table D-1 presented in Attachment 4 (Exhibit D) of the grant application. Note that Table F-3 may differ from Table D-1 if there are costs, such as opportunity costs, that are not eligible for reimbursement under this grant program. Note that cost savings realized as a result of the Proposal should be included as a benefit, <u>not</u> subtracted from the Proposal costs.

Methods for analyzing costs are presented in the following sections along with the corresponding tables. In addition to completing the appropriate analysis tables, applicants should provide sufficient narrative description to support the numbers entered into the tables and to provide a complete documentation of the costs of the Proposal.

<u>Table F-3</u>. To complete Table F-3, the applicant should use the following steps:

- Columns (a) through (l): Enter costs for each applicable cost category in each year of the 50-year planning horizon. Enter costs beginning in the first year of expenditure, not the first year of operation;
- Column (m): Enter the sum of all costs (Columns (a) through (l));
- ♦ Column (n): These are the discount factors provided in Table F-1;
- Column (o): Enter the result of dividing Column (m) by the discount factor in Column (n) for each year (each row);
- ♦ Bottom of Column (o): Total Present Value of Discounted Costs: Enter the sum of the Column (o) entries in the last row at the bottom of the table. This is the total present value of all costs discounted at 6%; and
- Comment Box: Enter any sources and references supporting the numbers used in this table.

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Table F-3 - Annual Costs of Proposa	I
(All costs should be in 2004 dollars)	

				Capita	Il Costs				Operation	ons and M	aintenance	Costs			ounting ulations
œ	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(1)	(m)	(n)	(o)
YEAR	Project Admin	Land Opp. Cost	Planning/ Design/ Docu- mentation	Construction /Implement- ation	Envir Compliance/ Mitigation/ Enhancement	Const. Admin	Other	Replace- ment	Admin	Opera- tion	Main- tenance	Other	Total Costs (a+b+l)	Discount Factor	Discounted Costs (m÷n)
2005														1.06	
2006														1.12	
2007														1.19	
2053														17.38	
2054														18.42	
				•				То	tal Prese	nt Value o	f Discoun	ted Cost	s (Sum of Co	olumn (o))	

Comment Box

PROPOSAL BENEFITS

Benefit Guidelines

This section provides guidance for displaying and describing the physical and economic water supply and water quality benefits of the Proposal. All expected water supply and water quality benefits of the Proposal should be described, and they should be quantified if possible. Methods for analyzing benefits are provided in the following sections along with corresponding tables for presenting data.

Narrative Description

In addition to completing the benefits analysis tables, the applicant should provide sufficient narrative description to support the information entered into the tables. The narrative description should include:

- A list of the types of water supply or water quality benefits expected to be provided by the Proposal. Allowable benefits include, but are not limited to:
 - ♦ Avoided water supply purchases;
 - Avoided water supply or water quality projects;
 - Avoided water treatment costs;
 - ♦ Avoided wastewater treatment costs:
 - Avoided water shortage costs;
 - Water revenue from sales to another purveyor or third party;
 - Water quality improvements related to providing water supplies; and
 - Water quality improvements related to protecting, restoring, or enhancing beneficial uses.
- A description of each type of water supply or water quality benefit including:
 - A discussion of future conditions with and without implementation of the Proposal;
 - Who obtains the benefits and where the beneficiaries are located (local, regional, or statewide);
 - When benefits will be received over the life of the Proposal;
 - When benefits will be accrued due to hydrologic variations such as seasonal availability of water; and
 - Other factors that affect when, how, or where benefits are received.
- A description of how the Proposal will be operated and maintained to provide the anticipated water supply or water quality benefits.
- A description of methods of monitoring benefits to document Proposal performance.
- ♦ A description of any uncertainty involving factors that may change the amount of anticipated water supply or water quality benefit.
- ♦ Identification of adverse effects caused by implementation of the Proposal on water supply or water quality, if any.

- If the Proposal includes a suite of projects provide a:
 - Description of the relationship of each project to the overall water supply and water quality benefits of the entire Proposal;
 - Description of water supply or water quality benefits for each project taken alone, if possible; and
 - Description of how the Proposal achieves greater benefits as an integrated suite of projects compared to individual projects.

Include citations from investigation reports, correspondence, Board minutes, internal memoranda, and other written records that support the documentation of benefits.

Benefits Analysis

Each benefit should be quantified in physical terms, if possible. Even if the benefit cannot be quantified, it must at a minimum be described. For each water supply or water quality physical benefit, the applicant should determine if a monetary value could be placed on each unit of benefit. For benefits that could not be quantified in physical terms, the applicant should still determine if an estimate of economic benefits is possible. In particular, avoided costs of other projects may be counted as a benefit even if the benefit cannot be physically quantified. A description of economic benefits should be provided even if monetary value cannot be quantified. The applicant must describe how economic benefits for the water supply or water quality benefits were calculated, with complete citations from documents available to reviewers upon request, to allow the reviewers to assess the accuracy and reasonableness of the analysis. For benefits that can be quantified in dollars, applicants should present results in 2004 dollars.

The applicant must avoid double-counting economic benefits. Each unit of benefit can have only one type of benefit in a given year; however, it is possible for portions of the total physical benefit in a year to provide different benefit types. For example, a portion of a new water supply could be sold to another purveyor and the remainder could be used for in-stream flow or used to avoid another water supply project.

The applicant should provide a description of economic factors that may affect or qualify the amount of economic benefits to be realized. The application should also include a discussion of any uncertainty about the future that might affect the level of benefits received.

Benefit Types

Several methods are available to place an estimated economic value on the benefits of the Proposal. A Proposal may contain one or more type of benefit and applicants should identify the appropriate table that needs to be completed for the economic analysis. Note that Tables F-4, F-5, and F-6 require expected values for future years. Results for a future year should reflect the development condition in that year as well as the probability distribution of hydrologic conditions.

The applicant should attempt to quantify each benefit using one or more of the four benefit types presented below, being careful not to double-count benefits:

- Water Quality Benefits: benefits that significantly change the water quality of impaired waters and sensitive habitat waters. If this benefit can be quantified in physical or economic terms, the other three benefit types below may also apply.
- <u>Physically Quantifiable Benefits</u>: benefits that can be measured in physical units (e.g., volume in acre-feet, water quality in milligrams per liter, etc.), regardless of whether they can be assigned a per-unit monetary value.
- Noided Costs of Future Projects: the cost savings that will come when the Proposal delays or makes unnecessary all or a portion of future projects and/or actions.
- Other Water Supply or Other Water Quality Benefits: benefits that do not meet the definitions of the benefits listed above. Other Water Supply or Other Water Quality Benefits may include avoided shortage costs, benefit estimates derived from other existing studies, or annual cost savings. Complete documentation must be provided.







If the applicant needs guidance on which type of benefit to claim, or for benefits that do not seem to fit into these types, please see the Foreword of this PSP for the appropriate contact person.

Follow the instructions provided in the following sections to document the benefits for each type, as each benefit type requires its own unique analysis.

WATER QUALITY BENEFITS

Projects that restore, enhance, or protect beneficial uses of water consistent with the Regional Water Board's Basin Plans for each of the nine regions in the state may also achieve significant water quality benefits; however, it may be difficult in some instances to quantify benefits from some of these types of projects. To capture and characterize benefits from these projects, the applicant should provide the information outlined below, along with a discussion, in the Proposal narrative. The discussion should specifically address where and how the water quality benefits will be achieved in the water body and what significant improvements will be achieved in water quality and the beneficial uses of that water body. Qualitative analysis will not be discounted when compared to a quantitative analysis if it is not feasible to quantify the benefits and the applicant provides adequate justification.

One of the IRWM Grant Program Preference (See Guidelines Section II.E) is to eliminate or significantly reduce pollution in impaired water bodies and sensitive habitats. Impaired water bodies are identified by the State Water Board and also referred to as "303(d) listed impaired water bodies." The 303(d) impaired water body list is posted on the State Water Board website at http://www/waterboards.ca.gov/tmdl/303d_lists.html. Benefits determination for Proposals/projects that, once implemented, lead to load reductions in impaired water bodies must focus on the expected load reductions. For water quality benefits, applicants are required to provide the information shown below to allow reviewers to assess the benefits claimed in the Proposal.

- Number of downstream water bodies affected;
- Water body names and water volumes;
- The fraction of each water body affected by the Proposal (if possible);
- Beneficial uses identified for the water bodies affected by the Proposal;
- Pollutants present in the affected water body;
- Concentrations of each pollutant in the affected water body;
- Sources of the pollutants;
- Beneficial use activities affected by each pollutant;
- The total load reduction of pollutants in the affected water body;
- The change in pollutant concentrations in the affected water body;
- The change in the beneficial-use activity for the affected portion of the water body; and
- Any other aspects of the Proposal that have a reasonable probability of affecting significant improvements in water quality restoring beneficial uses.

In addition, if the water quality benefits can be quantified in physical or economic terms, applicants should identify the appropriate table that needs to be completed for the economic analysis of water quality benefits. For example, if the benefit is an avoided project cost, applicants should complete Table F-5; otherwise, applicants should complete Table F-6.

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PHYSICALLY QUANTIFIABLE BENEFITS

To present Physically Quantifiable Benefit, complete Table F-4.

Table F-4 is designed to accommodate only physical quantification or both physical quantification and economic quantification. In particular, if an applicant is unable to submit any economic analysis of benefits, the corresponding dollar value columns in the tables of this section should be left empty; however, columns for the quantities should be completed if possible.

<u>Table F-4</u>. To complete Table F-4, the applicant should use the following steps:

- Format a table that will display the various water supply and water quality benefits that are claimed in the Proposal. For each individual benefit, repeat a full block of rows, including column headings and the full range of years.
- Identify the benefit and measure (e.g., units) of that benefit in the boxes provided. This must be completed for each benefit claimed.
- Once the table has been appropriately formatted, the applicant should provide the following information for each year of the 50-year planning horizon:
 - Column (b): identify the level (units) of the water supply or water quality benefit for the without-Proposal condition.
 - Column (c): identify the level (units) of the water supply or water quality benefit for the with-Proposal condition.
 - Column (d): enter the result of subtracting Column (b) from Column (c) to determine the change in the water supply or water quality resource resulting from the Proposal.
 - Columns (e) through (i): complete these columns if the applicant has identified a monetary value for the benefit. Include citations for supporting documentation for unit values in the comment box. All documentation is to be made available to reviewers upon request.
 - Column (e): enter the per unit monetary value for the benefit claimed.
 - Column (f): enter the result of multiplying the value in Column (d) by the value in Column (e).
 - Column (g): enter the sum of the individual "Annual \$ Values" listed in Column (f) for each benefit claimed. For example, if the Proposal has monetary values for water supply benefits and two different types of water quality benefits, the sum of the three values would be entered into Column (g).
 - Column (h): These are the discount factors provided in Table F-1.
 - Column (i): enter the result of dividing each value in Column (g) by the discount factor in Column (h).
 - Column (i) Bottom of the Table: enter the total of all Column (i) values in the "Total Present Value of Discounted Benefits" row. This number will be used to complete Table F-7, Row (1).
 - Comment Box: enter any sources and references supporting the numbers used in this table.

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	
Benefit:						Discounting Calculations for Economic Benefit			
				claiming \$	ese 2 columns if Value for the enefit				
	Without Proposal	With Proposal	Change Resulting from Proposal (c - b)	Unit \$ Value	Annual \$ Value (d x e)	Total Benefits (Sum of Annual \$ Value for each benefit)	Discount Factor	Discounted Benefits (g ÷ h)	
2005							1.06		
2006							1.12		
2007							1.19		
2053							17.38		
2054							18.42		

BENEFITS FROM AVOIDED COSTS OF FUTURE PROJECTS

This type of benefit applies to the extent at which the Proposal will cause other water supply or water quality projects to be avoided, delayed, or scaled down. To claim this type of benefit, the applicant should provide documentation that the avoided cost would actually be incurred in the absence of the Proposal. To estimate a benefit from avoided costs of future projects, complete Table F-5. While this is a benefit, the estimate will require a cost estimate for the avoided project. Estimates from existing studies can be used to complete Table F-5; however, the applicant should justify that those estimates are reasonably comparable to the standards and procedures described in the cost section of this exhibit.

Note that a precise quantification of physical benefits is not required to claim costs of avoided project(s) as a benefit; however, the avoided project should provide approximately the same types and levels of benefits as the Proposal. An applicant should compare the amount and timing of physical benefits from the Proposal with the avoided alternative(s) to make sure they are comparable. If an alternative avoided project provides a physical benefit larger than that of the Proposal, the applicant must make adjustments to the alternative to make it similar to the Proposal. Without an adjustment, only a portion of the cost of the alternative can be claimed as a measure of benefit. If the alternative provides an amount of physical benefit smaller than that of the Proposal, an additional benefit might be claimed (see Table F-5, 2nd to last row – "% Avoided Cost Claimed by Proposal"). If the alternative provides physical benefits at times (e.g. year types or season) different from those of the Proposal, additional adjustments may be needed or the alternative may simply not be a reasonable alternative to the Proposal. If the alternative would delay action until a future time within the planning horizon, enter the delayed costs when they are avoided as a benefit, and enter them again as a cost at the time they would be paid with the Proposal.

Table F-5. To complete Table F-5, the applicant must:

- Format a table that will display all avoided alternatives that apply by copying Columns (b) through (e) of Table F-5 for each individual alternative.
- Describe the avoided alternative in the box provided. This must be completed for each avoided alternative.
- Once the table has been appropriately formatted, the applicant should provide the following information for each year of the 50-year planning horizon:
 - Column (b): enter capital costs for each year of the 50-year planning horizon. Enter costs beginning in the first year of expenditure of any cost, not the first year of operation.
 - Column (c): enter replacement costs for each year of the 50-year planning horizon. Enter costs beginning in the first year of expenditure of any cost, not the first year of operation.
 - Column (d): enter O&M costs for each year of the 50-year planning horizon. Enter costs beginning in the first year of expenditure of any cost, not the first year of operation.
 - Column (e): enter the sum of costs contained in Columns (b), (c), and (d).
 - Column (f): enter the sum of "Total Cost Avoided for Individual Alternatives" for each alternative.
 - Column (h): enter the result of dividing the value in Column (f) by the number provided in Column (g) for each year (each row). A full listing of Discount Factors to be used in Column (g) is provided in Table F-1.
- Bottom of Column (h): to represent the net present value of all costs discounted at 6% and to take into account the percentage of the avoided project claimed, do the following:
 - Enter the sum of all values in Column (h) in the row marked "Total Present Value of Discounted Costs." This represents the net present value of all costs discounted at 6%.
 - In the next row, enter the "% Claimed by Proposal." This is the percentage of the cost of the alternative that the applicant is claiming for the Proposal. If claiming the entire cost, enter 100%.
 - In the final row labeled "Total Present Value of Discounted Costs Claimed by Proposal," enter the result of multiplying the "Total Present Value of Discounted Costs by the % Annual Avoided Cost Claimed by Proposal." This number will be used to complete Table F-7 Row (2).
- Comment box: enter any sources and references supporting the numbers used in this table.





			Costs		Discounting Calculations				
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)		
	Avoided A	Iternative:							
	Replicate t		ock with headers	for each avoided					
YEAR	Avoided Capital Costs	Avoided Replace- ment Costs	Avoided Operations and Maintenance Costs	Total Cost Avoided for Individual Alternatives (b) + (c) + (d)	Total Cost Avoided for All Alternatives (Sum of Total Cost Avoided for Individual Alternatives)	Discount Factor	Discounted Costs $(f) \div (g)$		
2005						1.06			
2006						1.12			
2007						1.19			
2053						17.38			
2054						18.42			
					Total Present Value of Disco (Sum of Court of Co	unted Costs Column (h))			
					% Avoided Cost Claimed	by Proposal			
		(To			voided Project Costs Claimed s x % Avoided Cost Claimed b				

OTHER WATER SUPPLY OR OTHER WATER QUALITY BENEFITS

Other Water Supply or Other Water Quality Benefits are those benefits that do not meet the criteria for Physically Quantifiable Benefits or Benefits from Avoided Costs of Future Projects. Because there is less tabular information for these benefits, it is important to provide sufficient documentation or narrative information to support the benefit estimates.

<u>Table F-6</u>. Other Water Supply or Other Water Quality Benefits Claimed summarizes the other water supply or other water quality benefits expected from the Proposal. To complete Table F-6, applicants should use the following steps:

- Column (b) top: identify the type of Other Water Supply or Other Water Quality benefit claimed. If multiple benefits are anticipated, additional blocks of rows may be added (including headers) to Table F-6 to document each benefit.
- Column (b) middle: describe the benefit in qualitative terms and the basis for associated monetary value of the benefits over the period of analysis.
- Column (b) bottom: enter the dollar value of the monetary benefit claimed for each year.
- Column (c): these are the discount factors provided in Table F-1.
- Column (d): enter the result of dividing each value in Column (b) by the discount factor in Column (c).

- ♦ Column (d) Bottom: enter the total of all Column (d) values in the "Total Present Value of Discounted Other Benefits" Row (last row). This number will be used to complete Table F-7 Row (3). Comment Box: provide citations and qualitative information to support the benefit claimed. Enter any sources or references supporting the number used in this table.
- Comment Box: provide any sources and references to support the benefits claimed.

(a)	(b)	(c)	(d)
YEAR	Type of Benefit Claimed:		
	Describe the Benefit Claimed:		
	Annual Benefit (\$)	Discount Factor	Discounted Benefits (b ÷ c)
2005		1.06	
2006		1.12	
2007		1.19	
2053		17.38	
2054		18.42	
	Total Present Value of Discour	nted Other Benefits ues in Column (d))	

Summary of Economic Benefits

A summary of all quantifiable economic benefits must be presented in Table F-7. If there are no quantified economic benefits, leave Table F-7 blank.

<u>Table F-7</u>. Total Water Supply and Water Quality Economic Benefits displays the total discounted direct water supply and water quality benefits to beneficiaries of the Proposal for the purpose of economic justification. It combines Tables F-4, F-5, and F-6 of the Proposal. In there are multiple sections of Table F-4 or F-6 corresponding to multiple benefits of each type, add additional rows in Table F-7, as needed.

- Row (1): enter the "Total Present Value of Discounted Benefits" from the bottom of Table F-4, Column (i).
- Row (2): enter the "Total Present Value of Discounted Costs Avoided by Proposal" from the bottom of Table F-5, Column (h).
- Row (3): enter the "Total Present Value of Discounted Other Benefits" from the bottom of Table F-6, Column (d).
- Row (4): enter the sum of Rows (1) through (3).

	Table F-7 - Total Water Supply and Water Quality Economic Benefits (In 2004 Dollars)	
(1)	Total Present Value of Discounted Benefits Based on Unit Value If completed from Table F-4, bottom of Column (i).	
(2)	Total Present Value of Discounted Avoided Project Costs Claimed by Proposal If completed from Table F-5, bottom of Column (h).	
(3)	Total Present Value of Discounted Other Benefits Claimed If completed from Table F-6, bottom of Column (d).	
(4)	Total Discounted Water Supply and Water Quality Benefits Sum of Rows 1, 2, and 3	

BENEFIT/COST RATIO AND SUMMARY OF ANALYSIS

Applicants whose Proposals have quantified economic benefits are required to calculate and present the Benefit/Cost ratio, see Table F-8, below. The Benefit/Cost ratio is the ratio of the present value of benefits to the Total Present Value of Discounted Costs. The calculation must include all economic costs and economic benefits of the Proposal. The applicant must also provide a summary discussion of these measures in terms of the apparent feasibility of the Proposal. To complete Table F-8:

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- Row (1): enter the total present value of benefits (Table F-7, Row 4).
- Row (2): enter Total Present Value of Discounted Costs (Table F-3, bottom of Column (o)).
- Row (3): enter the result of dividing Row (1) by Row (2) as the Benefit Cost ration.

	Table F-8 – Benefit/Cost Ratio (In 2004 Dollars)	
(1)	Total Present Value of Benefits Table F-7, Row 4	
(2)	Total Present Value of Discounted Costs Table F-3, bottom of Column (o)	
(3)	The result of Row 1 ÷ Row 2 = Benefit/Cost Ratio	

Applicants whose Proposal does not have quantified economic benefits must summarize any water supply or water quality benefits that have been physically quantified and provide a qualitative discussion of benefits that have not been quantified in physical or economic terms.

EXHIBIT GOTHER EXPECTED BENEFITS

The Other Expected Benefits may include, but are not limited to, the following benefit types:

- Ecosystem Restoration;
- Flood Control;
- Recreation and Public Access; and
- Power Cost Savings and Production.

The following should be provided for each type of benefit the applicant wishes to claim:

- Estimates of without-project conditions;
- **Estimates of with-project conditions**;
- Description of methods used to estimate without- and with-project conditions;
- How the project will achieve with-project conditions;
- Description of methods of monitoring benefits to document Proposal performance;
- Description of the distribution of local, regional, and statewide benefits;
- Who will receive the benefits;
- ♦ When the benefits will be received;
- Uncertainty of the benefits;
- Description of any adverse effects; and
- Full citations for data and method sources.

Applicants should attempt to make descriptions as clean, detailed, and quantitative as possible. For example, a Habitat Evaluation Procedure for ecosystem restoration is preferred but not required. Similarly, computer models can be used to provide more quantitative analyses of benefits of several types. Clear, concise tables and narrative descriptions are preferred. Dollar values should be presented if possible. Any economic analysis should adhere to the general principles described in Exhibit F. For example, present a 50-year period of analysis, displaying results in 2004 dollars and documenting benefits by reference to existing documents or studies where possible. Any references cited in Attachment 8 must be submitted with the application. Table 1 – FAAST Checklist, Item 7 lists the format and number of copies for the documentation required to be submitted. Physical benefits, unit values, and avoided costs should be provided if possible. Display formats as provided in Tables F-4 through F-7 can be used or the applicant can use other formats as long as the general principles are followed.

ECOSYSTEM RESTORATION

Ecosystem restoration includes habitat restoration, ecosystem improvements and preservation, and fish and wildlife enhancement. For ecosystem restoration analysis, applicants may count benefits from both restoration and preservation of high-quality existing habitat. The ecosystem benefits analysis should take into account both structural and functional elements of the ecosystem being protected or restored. Without- and with-project conditions for ecosystem restoration could include the acreage of habitat, the quality of that habitat, and the special-status species considered in the analysis. If a Habitat Evaluation Procedure has been performed, enter information from that analysis. Note that without- and with-project conditions will be the same for ecosystem preservation.

If possible, determine an economic value of the ecosystem benefit. For information on valuing ecosystem restoration benefits, a U.S. Department of Agriculture and National Oceanic and Atmospheric Administration funded website (http://www.ecosystemvaluation.org) describes various methods, gives examples, and explains the advantages and disadvantages of each method.

FLOOD CONTROL

For flood control benefits, the applicant should document historical flood damage and projected with-project flood damage. If the physical system has changed significantly since the last flood, without-project flood damage should also be estimated. Estimates may be determined though the use of computer software packages with the help of maps and information from the Federal Emergency Management Agency (FEMA), local flood control agencies, and others.

Various software programs are available to assist in the flood control analysis. These include FEMA's "Mitigation BCA Toolkit" (go to http://www.fema.gov/hazus/hz_flood.shtm and then scroll down to the "B/C Guidelines") and the U.S. Army Corps of Engineers HEC-FDA (http://www.iwr.usace.army.mil/iwr/software/software.htm). The applicants may choose any analysis method or tool they deem appropriate.

If possible, determine an economic value of the flood control benefit.

RECREATION AND PUBLIC ACCESS

Recreation and public access benefits should be documented on a with- and without-project basis. With- and without-project conditions could include the types and quality of recreational activities, visitor days, and unit day values. If possible, determine an economic value of the recreation and public access benefits.

POWER COST SAVINGS AND PRODUCTION

Power cost savings and power production benefits should be based on market value of power. Document the quantity and the unit value of the power saved or produced. Include information on when the savings or production would occur (time of year, time of day), change in capacity, or other factors that influence the cost savings or production benefit. Note that power cost savings already included as part of a water supply or water quality benefit in Exhibit F should not be included here.

OTHER

If the Proposal has benefits not already accounted for, please describe them in detail. Some benefits, such as in-stream flow, may be difficult to categorize. In such cases, the applicant should attempt to place it in the most appropriate category or categories, or describe it as another benefit here.

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EXHIBIT H SCIENTIFIC AND TECHNICAL MERIT

INTRODUCTION

General guidelines about the required technical report, certificates, and environmental documents and permits, are provided in this Exhibit. Table 1 – FAAST Checklist, Item 7 lists the format and number of copies for the documentation required to be submitted.

TECHNICAL ADEQUACY

The technical adequacy is a key requirement of the Scientific and Technical Merit of the Proposal. The technical adequacy will be determined on the basis of the following:

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- Application of currently accepted scientific and technical principles and proven technologies appropriate for the types of projects proposed for implementation;
- Use of an appropriate quantity and quality of data in the analysis of the project;

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- Now well scientific and technical elements support the goals and objectives of the Proposal;
- The technical information provided in Attachment 9;
- Technical soundness of the methods used in estimating or computing the project benefits that are claimed in the application; and
- he F

Applicant's ability to implement the Proposal.

In order to demonstrate technical adequacy, the applicant must submit either a detailed Attachment 9, as outlined below, or a detailed narrative description that is supported by data, analysis, and references. These references could include technical documents such as feasibility studies, modeling reports, project design reports, related design and technical memoranda, and project site and facility maps.

Attachment 9 must provide the following:

- A detailed technical description of each project in the Proposal;
- Maps and figures showing the project(s), the area covered, and their relative location in the region described in the Proposal;
- Discussion of the scientific and technical elements that support the goals and objectives of the Proposal;
- ♦ Identification of the water bodies and water sources that are affected by the Proposal;
- Discussion of the physical and water quality characteristics of the surface water body affected by the Proposal;
- Discussion of the physical and water quality characteristics of the aquifer and groundwater basins affected by the Proposal; and
- Discussion of the physical characteristics of the environmental habitats affected by the Proposal.

Attachment 9 must address each of the following items or project related activities where included in the Proposal or where the Proposal has the potential to affect these activities:

- Discussion of extraction capability for projects that store and remove groundwater;
- Discussion on the geology of a recharge area and the aquifer used for storage, including the lithology, stratigraphy, and structure;
- Discussion on the storage coefficients of the aguifers and the volume of storage space available;
- Discussion of wastewater treatment processes and facilities including capacities, present flows, description of treatment processes, and design criteria;
- Discussion of levee and flood control processes and facilities, including capacities, hydrology, description of control processes, and design criteria;
- Discussion of conveyance systems that will be used to recover and convey stored and/or treated water;
- Discussion of the potential impacts on water quality from the operation of the proposed project(s);
- Discussion of the potential impacts on the physical characteristics of water bodies and aquifers from operation of the project;
- Discussion of water supply yield from the project including enumeration of how the project will improve water supply deliveries and reliability;
- Discussion of the measures and controls that a project will implement to prevent or minimize storm water or non-point source pollution; and
- Discussion of the environmental conditions, as well as restoration, enhancement, or protection methods.

The following items should be considered and addressed in Attachment 9 when providing the project discussion outlined above:

- Document that the project was identified through application of high quality information, technically feasible methods, and proven technologies;
- Discuss the data, technical methods, and analyses that were used to develop the project; and
- Demonstrate that appropriate and well-defined quality assurance and quality control measures were used for the development of the project and will be used in implementation.

The following information should be provided to support the applicant's ability to implement the Proposal:

- Discussion of qualifications of personnel who are involved in project development, which may include professional registrations (such as a California registered geologist or professional engineer), certifications, and resumes of persons performing and overseeing work to be performed during implementation or construction; and
- Discussion of past performance with previous State grants and/or comparable projects, and relevant examples of successful projects completed within a fixed budget and timeframe.

ENVIRONMENTAL DOCUMENTATION AND PERMITS

Attachment 9 must include a detailed plan for compliance with all applicable environmental requirements. Attachment 9 should address all the potential environmental, social and economic impacts of the Proposal, including mitigation, required under CEQA and, if applicable, NEPA.

Attachment 9 must also address compliance with local, State, and federal permitting requirements. Applicants must also list and provide a detailed plan for obtaining all required permits, easement rights, licenses, land acquisitions, and



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certifications of approval from federal, State, and local agencies that may be required for each project contain in the Proposal. Identify whether the applicant will require access to public or private property that the applicant does not own to implement the Proposal.

CERTIFICATION OF FEASIBILITY

Applicants must provide certification statements regarding feasibility of each project contained in the Proposal. The certificate must be signed by an appropriate professional, who is working on the individual project, and is licensed by the State of California, such as a registered civil engineer or registered geologist/hydrogeologist. For projects that do not involve design work conducted and reviewed by a licensed engineer or geologist/hydrogeologist, the certificate must be signed by a relevant professional, such as water quality specialist, environmental planner, or biologist; the curriculum vitae of the signatory should also be submitted with the certificate. More than one certificate may be required for one project if it involves design work from multiple disciplines. For example, a groundwater storage/recharge project will require two certification statements – one from a registered civil engineer and one from a registered geologist/hydrogeologist.

Example certification statements are provided in Figures H-1, H-2, and H-3.

Information cited in the certification statements must be provided as part of the application, see Table 1 - FAAST Checklist, Item 7 of this PSP for direction regarding submittal of supporting documentation.

If feasibility and pilot studies have not been completed for any of the proposed projects, provide an explanation of what has been done to determine the project's feasibility.

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Figure H-1. Engineering Feasibility Certification

I,, a California registered civil engineer, have reviewed the information	
presented in support of this Proposal for the following project:	
Based on this information, and other knowledge I have regarding the proposed project, I find that it can be designed,	
constructed, and operated to accomplish the purpose for which it is planned. The information I have reviewed to	
document this statement is listed below.	D
(Original signature)	R
List information supporting this certification: (provide a list, e.g., feasibility studies, engineering design studies, construction plans and specifications, water rights permits, etc.).	A
	F

Figure H-2. Hydrogeologic Feasibility Certification

I,, a California registered professional geologist, have reviewed the	
information presented in support of this Proposal for the following project:	
Based on this information, and other knowledge I have regarding the proposed project, I find that the project's	
hydrogeological/geological properties adequately support the project. The information I have reviewed to document	
these statements is listed below.	D
	R
(Original signature)	
List information supporting this certification: (provide a list, e.g., feasibility studies, geologic, geographical, and/or hydrogeologic studies, construction plans and specifications, etc.).	A
	F

Figure H-3. Project Feasibility Certification (For projects that do not involve design work by a licensed professional)

I,, a, have reviewed the information	
presented in support of this Proposal for the following project:	
Based on this information, and other knowledge I have regarding the proposed project, I find that it can be	
implemented and operated to accomplish the purpose for which it is planned. The information I have reviewed to	
document this statement is listed below. My curriculum vita is also attached.	D
	D
	1/
(Original signature)	
List information supporting this certification: (provide a list, e.g., project evaluation studies, habitat conservation plans, project implementation plans, monitoring plans, etc.).	A
Attach curriculum vita	
	F
(Original signature) List information supporting this certification: (provide a list, e.g., project evaluation studies, habitat conservation plans, project implementation plans, monitoring plans, etc.).	R A F

EXHIBIT IMONITORING, ASSESSMENT, AND PERFORMANCE MEASURES

Monitoring, assessment, and performance measures must be designed so that DWR and State Water Board can ensure that the projects contained in the Proposal meet their intended goals and provide value to the State of California. Proposals receive funding with the understanding that the performance of work described in the Work Plan will be effective in achieving the objectives and stated benefits of the project(s). Attachment 10 must include monitoring, assessment, and performance measures for each project in the Proposal and submitted with the grant application. In other State Water Board programs the content of the Attachment 10 is also referred to as a PAEP.

Grant recipients will be required to submit the following reports to the granting agency:

- Periodic progress reports during the execution of the Work Plan,
- A completion report, and
- Periodic performance reports for up to 10 years after the completion of the project.

These reports shall include information collected by the applicant and explain whether the objectives and benefits of the project have been attained.

Individual projects may have multiple objectives and benefits and may have multiple performance measures. For example, a project conducting wetlands restoration, public participation, education, and outreach could expect to have greater performance measurement costs than a project containing only one such objective of similar scope. Depending on the nature of a particular project, the project performance data may be used as the basis for general progress and final reporting. The development, implementation, and reporting of project progress, Monitoring, Assessment, and Performance Measures should be integrated to achieve the greatest economy.

For each project contained in the Proposal, Attachment 10 should include the following:

- A description of the project objectives and benefits, including quantitative estimates of the water supply, water quality, and additional benefits that will accrue due to implementation of the project in conjunction with the other projects in the Proposal;
- A description of the metrics and evaluation criteria designed to monitor progress toward attaining project objectives and benefits;
- A description of how the project-specific monitoring and evaluation program fits into the IRWM Plan's regional monitoring and evaluation program;
- A description of how pre-project conditions and data baselines will be determined, the basic assumptions being used, and the anticipated accuracy of the data to be produced;
- A narrative description of the methods and protocols used in developing sampling and monitoring design concepts and plans, including reasons for selecting the sampling design. The applicant should utilize existing accepted protocols appropriate for the different types of activities in each project;
- An explanation of the monitoring methods that will be used and the project monitoring data that will be collected to assess project performance, including the frequency of collecting different types of data;
- ♦ A Performance Measurement Table, see Table I-1, that lists the effects or parameters that will be measured before, during, and after implementation of the project;
- An explanation of how the data collected will be used to evaluate success in relation to project objectives and stated project benefits;



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- A description of how external factors, such as changes in weather, water management programs, regulations, or social conditions, will be taken into account in implementing of the project;
- Information about how the data and other information will be formatted, handled, stored, reported, transmitted, and made accessible to DWR, State Water Board, and the public;
- A description of frequency of reporting to the granting agency during the following three stages of project implementation: 1) construction/initial implementation, 2) completion of construction/initial implementation, and 3) for 10 years after the completion of construction/initial implementation;
- A coordination plan with the granting agency staff for review and feedback and for managing any needed changes to the monitoring, assessment, and performance measures; and
- A description of actions that will be taken to comply with special requirements for specific types of projects as described below, such as development and implementation, if required, of a Quality Assurance Project Plan (QAPP).

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Table I-1 - Performance Measurement Matrix								
Project Objectives, and Benefits	No.	Performance Measurements	Source for Measurement Protocol	Baseline Measurement	Projected Monitoring Period	Specific Success Criteria		

Explanation of Row:

Each row should be a project objective or a project benefit as claimed in the Proposal.

Explanation of Columns:

Project Objectives and Benefits—The project objectives are associated with a work item or work item description. A work item may contain several sub-work items or may contain several Performance Measurements. The same is true for project benefits.

Performance Measurements—Brief descriptions of the purpose or type of measurement, not a full specification of the measurement protocol. The measurement number corresponding to the performance measurement should be used in describing measurement sampling and monitoring design.

Source for Measurement Protocol—Cite the agency, website, or other resources that may provide the information on the best methods for conducting recommended measurements. There are accepted protocols that were developed and published by state agencies and other sources. Applicants are encouraged to use those accepted protocols, as appropriate, because they will provide consistency among all site-specific approaches to measure, monitor, and evaluate project success.

Baseline Measurement—Specification of special baseline conditions or considerations. It may be left blank if the circumstances of the baseline monitoring do not warrant specific consideration.

Specific Success Criteria—Specification of success or performance assessment criteria.

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SPECIAL REQUIREMENTS FOR SPECIFIC TYPES OF PROJECTS

There may be special monitoring requirements, depending on the projects contained in the Proposal. Attachment 10 should be developed with due consideration to the requirements outlined below.

If a project is designed to reduce the amount of a specific pollutant or improve the physical quality of a water resource, then water quality monitoring will be required. When water quality monitoring is included in the project, the grantee must prepare a QAPP. Submittal of a QAPP is not required as part of this application; however, Attachment 10 should include a narrative description of how this requirement will be addressed. In the case where ambient water quality monitoring is included, the QAPP must also be consistent with the data quality and reporting provisions established by the State Water Board's Surface Water Ambient Monitoring Program (SWAMP) and the Groundwater Ambient Monitoring Assessment (GAMA) programs. The SWAMP and GAMA performance-based QAPP guidance and data quality provisions are posted on the State Water Board's websites at:

http://www.waterboards.ca.gov/swamp/qapp.html and

http://www.waterboards.ca.gov/gama.

If the project includes the protection, restoration, creation of streams, shorelines, or wetlands, then stream and/or wetland monitoring will be required. The applicant must provide an annual accounting of the acres of wetlands restored and created, feet of stream bank and shoreline protected, and feet of stream channel stabilized.

If the project entails the removal or reduction of nitrogen, phosphorus, and/or sediment from water resources, then an annual estimate of load reductions (in pounds/year for nutrients and tons/year for sediment) must be provided as part of Attachment 10 which must also include the calculations used to derive those estimates. Modeled estimates for load reductions without empirical confirmation of results from monitoring may be used as long as the model used is identified.

If the project includes restoration or construction activities, then photo documentation will be required and a description of planned activities must be included in Attachment 10. Photo documentation must be done in accordance with the State Water Board guidelines that have been developed for this purpose. The guidelines can be viewed at http://www.waterboards.ca.gov/nps/docs/cwtguidance/4214sop.doc.

If the project includes groundwater storage or recharge, then applicants are required to provide a discussion of the monitoring system to be used to verify project performance with respect to yield or other project benefits or objectives identified in the application. Applicants must also explain the monitoring of diversions, groundwater levels, recharge, extraction, and any other indicators that would help document project performance and attainment of any benefits claimed for the project. Attachment 10 should include a detailed description of the proposed groundwater monitoring program, including the number, locations, and construction details for all groundwater monitoring wells and any other monitoring measures that are part of the project. Monitoring wells and a groundwater monitoring system are considered an integral part of groundwater storage and recharge projects and must be incorporated in the project plans and specifications.

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EXHIBIT JCERTIFICATION OF UNDERSTANDING

THE UNDERSIGNED CERTIFIES THAT:

The application submitted by <Insert Name of Applicant> for <Insert Proposal Title> for a Proposition 50, Chapter 8, Implementation Grant contains a request for waiver or reduction of funding match based on disadvantaged communities. The above named applicant understands:

- The waiver or reduction of the funding match presented in the application is a request that will not be automatically granted.
- ♦ Department of Water Resources and State Water Resources Control Board will review and consider the disadvantaged community information submitted in the application prior to making a decision to accept, modify, or deny such a waiver or reduction.
- Should the proposal be chosen for funding, but the requested waiver or reduction in funding match be rejected or modified, the grantee is responsible for costs exceeding the grant funding amount to complete the project.
- The granting agency will rescind the grant award if the grantee cannot cover increased costs due to rejection or modification of the request for a waiver of or reduction in the funding match or adequately restructure the grant proposal so that it can meet the intent of the original proposal.

Signature:
Printed Name:
Title:
Agency:
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EXHIBIT KCALFED ROD CONSISTENCY

The Bay-Delta Region and CALFED Solution Area are described in the CALFED Bay-Delta Program Final Programmatic EIS/EIR, Chapter 1.3 Program Description, available on the California Bay-Delta Authority website at:

http://www/calwater.ca.gov/CALFEDDocuments/Final_EIS_EIR.shtml

Complete the following form for each project within the Proposal that assists in meeting one or more of the CALFED Bay-Delta Program goals, is consistent with the CALFED Programmatic ROD, and can be implemented, to the maximum extent possible, through local and regional programs.

FORM # CALFED ROD CONSISTENCY

<Insert Project Title> is located in:

Sacramento-San Joaquin Bay-Delta Region or	
The CALFED Solution Area.	
<insert project="" title=""> will assist in meeting the following CALFED Bay-Delta Program Goals (Objectives) (select one or more goals, as appropriate):</insert>	-
Provide good water quality for all beneficial uses;	-
Improve and increase aquatic and terrestrial habitats and improve ecological functions in the Bay–Delta to support sustainable populations of diverse and valuable plant and animal species;	,
Reduce the mismatch between Bay-Delta water supplies and current and projected beneficial uses dependent on the Bay-Delta system; or	

Reduce the risk to land use and associated economic activities, water supply, infrastructure, and the ecosystem

- Describe how the Proposal assists in meeting one or more of the goals of the CALFED Bay-Delta Program;
- Describe how the project will be consistent with the CALFED ROD.

from catastrophic breaching of Delta levees.

• Describe how the project will, to the maximum extent possible, be implemented through local and regional programs.